

Uniform criteria for access to

NON-EMERGENCY TREATMENT 2010



Uniform criteria for access to non-emergency treatment 2010.

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SUMMARY

Uniform criteria for access to non-emergency treatment 2010.

The Acts amending the Primary Health Care Act, the Act on Specialized Medical Care, the Act on the Status and Rights of Patients, and the Act on Client Charges in Social Welfare and Health Care concerning the maximum times to arrange treatment will come into force on 1 March 2005 (Acts 855–858/2004, Decree 1019/2004, Government Bill 77/2004). According to Section 10.1 of the amended Act on Specialized Medical Care, the joint municipal boards of hospital districts answer for providing the specialised medical care prescribed in the Act in their region in accordance with uniform medical and odontological principles.

There have been great variations in treatment practices across the country and decision on access to non-emergency treatment have been made on different grounds. The aim of the legislative amendments is to secure access to treatment on equal grounds irrespective of the place of residence.

As a part of the National Health Care Project, the compilation of uniform grounds for access to non-emergency care was initiated in February 2004. A management group was set for the compilation on 26 February 2004 and it has representatives from the Ministry of Social Affairs and Health, the National Authority for Medicolegal Affairs, the National Research and Development Centre for Welfare and Health (Stakes), the Association of Finnish Local and Regional Authorities, the hospital districts, health centres and organisations among others. The task of the management group is to steer, guide and coordinate the compilation of the uniform criteria. Also trade organisations in health care, specialists' associations, municipalities, authorities and patients' associations have been consulted during the work.

The actual compilation of the criteria for treatment was allocated to the health care districts according to specialties on 21 April 2004. In the health care districts, the work has been conducted in cooperation with the expertise in primary health care, nursing, and medicine so that, if possible, organisations, the Social Insurance Institute and municipalities were consulted. The treatment criteria have been revised on the basis of this consultation and views presented during meetings.

Treatment criteria have been compiled for the treatment and examination of 193 diseases. The goal is to compile criteria for about 80 % of non-emergency treatment. The work will not be completed at one go; instead the treatment criteria are revised and further developed based on experience. The hospital districts and health centres assess and monitor the functioning of the criteria. In each of handbooks, the names and contact information of the members of the relevant working group as well as the person in charge for the working group are included. Eventual suggestions for revisions or changes should be delivered to the person in charge for the working groups as well as to Jaana Aho, Secretary for the Management Group ([jaana.aho\(at\)stm.fi](mailto:jaana.aho(at)stm.fi)).

The criteria are revised and developed continuously. The latest criteria are available at: www.stm.fi and www.terveysportti.fi. The public Internet access to the criteria means that also citizens can study the criteria.

Physicians will be using these criteria as a guide when deciding on the treatment of patients. In addition to the criteria, the physician should always take into consideration the patient's individual living situation and need for treatment. The physician will make a decision concerning the patient's treatment in mutual understanding with the patient. The patient does not have the right to get any treatment he or she wants. Individual physicians or dentists may, if well founded, diverge from the uniform criteria.

The Management Group for the project expresses its thanks to all the hundreds of health care professionals who have participated in this work.

Key words: customers, health care, health care centres, patients, specialized health care, specialized health care districts, treatment

TIIVISTELMÄ

Yhtenäiset kiireettömän hoidon perusteet 2010.

Hoidon järjestämisen enimmäisaikoja koskevat kansanterveyslain, erikoissairaanhoidon, potilaslain ja asiakasmaksulain muutokset tulivat voimaan 1.3.2005 (lait 855-858/2004, asetus 1019/2004, HE 77/2004 vp). Muutetun erikoissairaanhoidon 10§:n 1. momentin mukaisesti sairaanhoitopiirin kuntayhtymä vastaa alueellaan tässä laissa säädetyn erikoissairaanhoidon järjestämisestä yhtenäisin lääketieteellisin ja hammaslääketieteellisin perustein.

Hoitokäytännöissä on ollut suuria vaihteluita eri puolilla maata, ja päätöksiä kiireettömän hoidon antamisesta on tehty erilaisin perustein. Lainsäädäntömuutosten tavoitteena turvata kansalaisille kiireettömään hoitoon pääsy samantyyppisin perustein asuinpaikasta riippumatta.

Osana kansallista hanketta terveydenhuollon turvaamiseksi on helmikuussa 2004 käynnistetty yhtenäisten kiireettömän hoidon perusteiden laatiminen. Työlle asetettiin johtoryhmä (STM006:00/2004, 26.2.2004), jossa on edustus mm. STM:stä, TEO:sta, Stakesista, Suomen Kuntaliitosta, sairaanhoitopiireistä, terveyskeskuksista sekä järjestöistä. Johtoryhmän tehtävänä on valvoa, ohjeistaa ja koordinoida yhtenäisten kriteerien laatimistyötä. Työssä on kuultu terveydenhuoltoalan ammattijärjestöjä, erikoislääkäriyhdistyksiä, kuntia, viranomaisia ja potilasjärjestöjä.

Varsinainen hoidon perusteiden laatiminen on jaettu erikoisaloittain erityisvastuualueille (STM006:01/2004, 21.4.2004). Erityisvastuualueilla työ on tehty yhteistyössä perusterveydenhuollon, hoitotyön ja lääketieteellisen asiantuntemuksen kanssa siten, että mahdollisuuksien mukaan on kuultu järjestöjä, Kansaneläkelaitosta ja kuntia. Lausuntokierroksen ja kuulemistilaisuuksissa esitettyjen näkemysten perusteella hoidon perusteisiin on tehty muutoksia.

Hoidon perusteet on laadittu alunperin 193 sairauden hoitoon. Vuoden 2005 jälkeen on laadittu perusteet mm. kroonisen kivun hoitoon ja fysioterapiaan sekä laadittu joitakin uusia kriteereitä täydentämään vanhoja kokonaisuuksia. Työ on vuoden 2008 aikana päivitetty siten, että sisällöllisiä muutoksia on tullut useisiin sairausryhmiin, eniten lastentautiopin kriteeristöihin. Tavoitteena on ollut laatia perusteet noin 80 % kiireettömästä hoidosta. Kyseessä ei ole työ, joka tehdään kerralla valmiiksi, vaan hoidon perusteita korjataan ja kehitetään edelleen saatujen kokemusten perusteella. Sairaanhoitopiirit ja terveyskeskukset arvioivat ja seuraavat suositusten toimivuutta. Jokaisen ohjeen lopussa on mainittu yhteystietoineen työn tehneen työryhmän jäsenen nimet ja työryhmän vastuuhenkilö. Mahdolliset korjaus- ja muutosehdotukset pyytään toimittamaan työryhmien vastuuhenkilöille ja hankkeen johtoryhmän sihteerille Jaana Aholle (jaana.aho(at)stm.fi).

Perusteita korjataan ja kehitetään jatkuvasti. Uusimmat perusteet on löydettävissä suomeksi ja ruotsiksi osoitteista www.stm.fi ja www.terveysportti.fi. Avoimen verkkojakelun kautta perusteet ovat myös kansalaisten luettavissa.

Lääkärit käyttävät näitä suosituksia apunaan päättäessään potilaan hoidosta. Suositusten ohella lääkäri ottaa aina hoitopäätöstä tehdessään huomioon potilaan yksilöllisen elämäntilanteen ja hoidon tarpeen. Lääkäri päättää potilaan hoidosta yhteisymmärryksessä tämän kanssa. Potilaalla ei ole oikeutta saada mitä tahansa haluamaansa hoitoa. Yksittäinen lääkäri tai hammaslääkäri voi hoidon aiheutta asettaessaan myös poiketa oheisista ohjeista perustellusta syystä.

Hankkeen johtoryhmä osoittaa kiitoksensa niille useille sadoille terveydenhuollon ammattilaisille, jotka ovat tehneet tämän työn.

Asiasanat: asiakkaat, erikoissairaanhoidon hoito, potilaat, sairaanhoitopiirit, terveydenhuolto, terveyskeskukset

SAMMANDRAG

Enhetliga grunder för icke-brådskande vård 2010.

Ändringarna i folkhälsolagen, lagen om specialiserad sjukvård, patientlagen och klientavgiftslagen angående de längsta tiderna för erhållande av vård träder i kraft den 1 mars 2005 (lagar 855–858/2004, förordning 1019/2004, RP 77/2004 rd). Enligt 10 § 1 mom. i den reviderade lagen om specialiserad sjukvård skall samkommunen för ett sjukvårdsdistrikt inom sitt område ansvara för att sådan specialiserad sjukvård som anges i denna lag ordnas på enhetliga medicinska och odontologiska grunder.

Vårdpraxisen har varierat stort i olika delar av landet och beslut angående icke-brådskande vård har fattats på olika grunder. Målet med lagändringarna är att trygga människornas tillgång till icke-brådskande vård på lika grunder oberoende av boningsort.

Som en del av det nationella projektet för tryggnad av hälso- och sjukvården startades det i februari 2004 utarbetande av enhetliga grunder för vård som inte är brådskande. För projektet tillsattes en ledningsgrupp (SHM006:00/2004, 26.2.2004) där det finns representanter från bl.a. social- och hälsovårdsministeriet, rättskyddscentralen för hälsovården, Stakes, Finlands kommunförbund, sjukvårdsdistrikten hälsovårdscentraler och organisationer. Under projektets gång har man samrått med fackorganisationer inom hälso- och sjukvården, specialistföreningar, kommuner, myndigheter och patientföreningar.

Det egentliga utarbetandet av grunderna för vård fördelades till specialomsorgsdistrikten enligt specialområden (SHM006:00/2004, 21.4.2004). Inom specialomsorgsdistrikten har arbetet förts i samarbete med sakkunniga inom primärvården, vårdarbetet och medicinen så att man i mån av möjlighet har samrått organisationer, folkpensionsanstalten och kommuner. Grunderna för vård har reviderats på basis av utlåtanden och de åsikter som fördes fram i diskussionsmöten.

Grunderna för vård har gjorts upp för vård och undersökning av 193 sjukdomar. Målet är att utarbeta grunder för ungefär 80 % av vård som inte är brådskande. Det är inte fråga om ett arbete som blir färdigt på en gång utan grunderna för vård revideras och vidareutvecklas på basis av erfarenheterna. Sjukvårdsdistrikten och hälsovårdscentralerna utvärderar och följer upp hur rekommendationerna fungerar. I varje handbok anges namn och kontaktuppgifter på medlemmarna i den relevanta arbetsgruppen samt på den ansvariga personen i arbetsgruppen. Eventuella rättelse- och ändringsförslag skall tillställas arbetsgruppernas ansvariga personer och sekreteraren för ledningsgruppen för projektet Jaana Aho (jaana.aho(at)stm.fi).

Grunderna revideras och utvecklas beständigt. De senaste grunderna finns på adresserna www.stm.fi och www.terveysportti.fi. Via Internet är rekommendationerna också tillgängliga för allmänheten.

Läkare skall i sitt vårdbeslut beakta dessa rekommendationer. Läkare skall även beakta patientens individuella levnadsförhållanden och vårdbehov. Läkare skall tillsammans med patienten bestämma om vård. Patienten har inte rätt till att få vilken som helst vård han eller hon önskar. Enskilda läkare eller tandläkare kan, om motiverat, avvika från rekommendationerna.

Ledningsgruppen för projektet önskar tacka alla de hundratals yrkesutbildade personer inom hälso- och sjukvården som har deltagit i detta arbete.

Nyckelord: hälso- och sjukvård, hälsovårdscentraler, klienter, vård, sjukhusdistrikt, specialiserad sjukvård

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GENERAL CRITERIA FOR NON-EMERGENCY SPECIALISED CARE IN THE FIELD OF INTERNAL MEDICINE

The criteria for non-emergency specialised care in the field of internal medicine are presented organ wise. Although the presentation is generally divided into the current subspecialties, the intention is not to let the criteria direct treatments within internal medicine. These criteria do not take a stand as to the indications for non-emergency care. Local circumstances and the patient's condition are decisive as the provision of care within internal medicine. Here, only those indications are considered which do not fit naturally under any main medical specialty.

It is important to realize that most patients with an ailment related to specialised care in the field of internal medicine require emergency or urgent treatment. These criteria emphasise this point. It is also important, and emphasised as well, that the total life situation of the patient needs to be taken into consideration. Decisions deviating from the unified criteria must be explained in writing in the patient files.

On the one hand, the risks from examinations and treatment in specialised care may outweigh the benefits, while, on the other hand, a patient may need service within specialised health care when all criteria for referral are not fulfilled. An example of this situation are the criteria for referring a patient with chronic bleeding anaemia in the field of gastroenterology to specialised health care. A criterion for referral is that the cause for the bleeding is unknown or needs confirmation; obviously, the cause for the bleeding may require consultation within specialised health care also if the cause is known.

When these criteria are applied in clinical work, it is important to take into consideration the local treatment chains that have been agreed on between the actors in health care. Certain tasks for specialised health care may well be delegated to the primary health care.

HYPERTENSION

ICD disease classification

- I10 Hypertensio essentialis (essential (primary) hypertension)
- I15 Hypertensio secundaria (secondary hypertension)

Examinations/functions within primary health care

- Information that the treatment recommended by the current care guideline on hypertension has been carried out successfully. If the treatment response is poor due to poor treatment compliance, evaluation by a specialist physician does not usually benefit the patient.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- The patient follows documentedly the instructions for treating hypertension, but there the treatment is associated with special problems
- There is a justifiable suspicion that the hypertension is caused by some other condition (e.g. by renal arterial stenosis, an aldosterone secreting tumour or a catecholamine secreting tumour) or is due to monogenic hypertension (i.e., hypertension related to one gene)
- The patient has organ manifestations caused by hypertension (changes in an internal organ caused by hypertension). The treatment as specified in the current care guidelines for hypertension has documentedly been followed

Current care guidelines (Hypertension)

www.kaypahoito.fi

Working group:

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EXAMINATIONS AND TREATMENT OF OSTEOPOROSIS

ICD disease classification

- M80 Osteoporosis with pathological fracture
- M81 Osteoporosis without pathological fracture
- M82 Osteoporosis in diseases classified elsewhere
- M85 Other disorders of bone density and structure

Examinations/functions within primary health care

- Primary diagnosis and treatment according to current care guidelines.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- The current care guidelines have been followed. Referral may not be needed, if there is a regional agreement regarding the work distribution between specialised health care and primary health care.

Follow-up within specialised health care

- As instructed by current care guidelines and local instructions for work distribution

Current care guidelines (Osteoporosis)

www.kaypahoito.fi

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WEIGHT LOSS FOR UNKNOWN REASON AND FATIGUE

ICD disease classification

R53 Aegritudo et lassitude (malaise and fatigue)

R63.4 Reductio ponderis abnormis (abnormal weight loss)

Examinations/functions within primary health care

- If the patient has repeated fatigue, mild weight fluctuations and fatigue, but no examinations have provided objective findings, the patient does not in general benefit from consultation within specialised health care.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- The patient has lost less than 5 % of his/her body weight in association with general symptoms, e.g., malaise or fatigue. The reason is unknown despite appropriate investigations within primary health care. Examinations with regard to the symptoms have not previously been carried out within specialised health care.
- The patient has lost more than 5-10 % of his/her weight and has symptoms (e.g. fatigue). The reason is unknown despite appropriate investigations within primary health care.

Current care guidelines:

None

Working group:

Kari Pietilä Pirkanmaa Hospital District, Saila Vikman Pirkanmaa Hospital District, Pekka Collin Pirkanmaa Hospital District, Heikki Saha Pirkanmaa Hospital District, Jukka Lumio Pirkanmaa Hospital District, Elli Koivunen Pirkanmaa Hospital District, Jorma Salmi Pirkanmaa Hospital District, Markku Korpela Pirkanmaa Hospital District

Contact person:

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GENERALIZED ENLARGED LYMPH NODES (LYMPHADENOPATHY)

ICD disease classification

R 59.1 Hyperplasia nodorum lymphaticorum generalisata
(generalised enlarged lymph nodes)

Examinations/functions within primary health care

- The patient does not, as a general rule, benefit from specialist consultation: there is an obvious explanation for the abnormal lymph nodes which does not imply a malignant disease.

Information needed for non-emergency referral to specialised health care and referral indications

It is important to exclude a need for emergency consultation within specialised health care (patients with rapidly emerging and progressing symptoms).

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- The patient has clinically suspicious lymph nodes that have not disappeared during follow-up.
- Patient has one or several lymph nodes that are clearly abnormal by size or consistency which have appeared recently without having diminished in size during 1-2 weeks of follow-up.

Current care guidelines:

None

Working group:

Kari Pietilä Pirkanmaa Hospital District, Saila Vikman Pirkanmaa Hospital District, Pekka Collin Pirkanmaa Hospital District, Heikki Saha Pirkanmaa Hospital District, Jukka Lumio Pirkanmaa Hospital District, Elli Koivunen Pirkanmaa Hospital District, Jorma Salmi Pirkanmaa Hospital District, Markku Korpela Pirkanmaa Hospital District

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MULTI-PROFESSIONAL EVALUATION OR PATIENTS WITH SEVERAL INTERNAL DISEASES

ICD disease classification

Internal disease codes

Examinations/functions within primary health care

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- When required by the primary health care and when the consultation request is in conformity with the local work distribution between specialised and primary care.

Current care guidelines:

None

Working group:

Kari Pietilä Pirkanmaa Hospital District, Salla Vikman Pirkanmaa Hospital District, Pekka Collin Pirkanmaa Hospital District, Heikki Saha Pirkanmaa Hospital District, Jukka Lumio Pirkanmaa Hospital District, Elli Koivunen Pirkanmaa Hospital District, Jorma Salmi Pirkanmaa Hospital District, Markku Korpela Pirkanmaa Hospital District

Contact person:

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METABOLIC SYNDROME AND EARLY TYPE 2 DIABETES

ICD disease classification

E66 Metabolic syndrome

E11 Diabetes adultorum (non-insulin dependent diabetes mellitus)

Examinations/functions within primary health care

- It is certain that the patient follows the treatment instructions.
- If examinations and treatment guidance have previously been provided by specialised health care, the patient does not generally benefit from a re-evaluation by a specialist physician.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- The patient follows documentedly the instructions for treating hypertension, but there the treatment is associated with special problems

Current care guidelines:

None

Working group:

Kari Pietilä Pirkanmaa Hospital District, Saila Vikman Pirkanmaa Hospital District, Pekka Collin Pirkanmaa Hospital District, Heikki Saha Pirkanmaa Hospital District, Jukka Lumio Pirkanmaa Hospital District, Elli Koivunen Pirkanmaa Hospital District, Jorma Salmi Pirkanmaa Hospital District, Markku Korpela Pirkanmaa Hospital District

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UNSPECIFIC CHEST PAIN OR DYSPNOEA

ICD disease classification

R07.4 Dolor pectoris non specificatus (chest pain, unspecified)

R06.0 Dyspnoea

Examinations/functions within primary health care

- If the patient has no objective findings and the probability of an organic condition is small, appropriate follow-up should be arranged within primary health care.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation is evaluated, it is important to consider and exclude the need for emergency consultation within specialised health care. If symptoms have begun acutely, most patients require emergency referral.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- The patient has no objective findings but the treating physician has a strong suspicion of an organic disease.
- The symptoms disturb the patient's activities of daily living at work or at home. The examinations and investigations within primary health care have not provided a diagnosis.

Current care guidelines:

None

Working group:

Kari Pietilä Pirkanmaa Hospital District, Saila Vikman Pirkanmaa Hospital District, Pekka Collin Pirkanmaa Hospital District, Heikki Saha Pirkanmaa Hospital District, Jukka Lumio Pirkanmaa Hospital District, Elli Koivunen Pirkanmaa Hospital District, Jorma Salmi Pirkanmaa Hospital District, Markku Korpela Pirkanmaa Hospital District

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UNSPECIFIC FEVER AND RECURRENT OR CHRONIC ELEVATION OF INFLAMMATORY MARKERS

ICD disease classification

- R50.9 Febris non specificata (fever, unspecified)
- R70.0 Ratio sedimenti erythrocytorum elevata et abnormitas viscositatis (elevated erythrocyte sedimentation rate and abnormality of plasma viscosity)

Examinations/functions within primary health care

- The patient has mild fever and normal laboratory test results: the patient does not, as a general rule, benefit from evaluation by a specialist physician

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation is evaluated, it is important to consider and exclude the need for emergency consultation within specialised health care.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Repeated elevation or permanent elevation of laboratory inflammatory markers with no obvious disease.
- Recurrent, undeniable and inexplicable fever episodes; laboratory values may be normal.
- Unequivocal episodes of fever associated with general symptoms and identifiable changes in laboratory values. There is no obvious disease that would explain the findings.

Current care guidelines:

None

Working group:

Kari Pietilä Pirkanmaa Hospital District, Saila Vikman Pirkanmaa Hospital District, Pekka Collin Pirkanmaa Hospital District, Heikki Saha Pirkanmaa Hospital District, Jukka Lumio Pirkanmaa Hospital District, Elli Koivunen Pirkanmaa Hospital District, Jorma Salmi Pirkanmaa Hospital District, Markku Korpela Pirkanmaa Hospital District

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THYROID DISEASES

ICD disease classification

- E00 Congenital iodine-deficiency syndrome
- E01 Iodine-deficiency-related thyroid disorders and allied conditions
- E02 Sub-clinical iodine-deficiency hypothyroidism
- E03 Other hypothyroidism
- E04 Other non-toxic goitre
- E05 Thyrotoxicosis (hyperthyroidism)
- E06 Thyroiditis
- E07 Other disorders of the thyroid

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation is assessed, the need for urgent or emergency treatment within specialised health care must be excluded, e.g., in conditions like highly symptomatic hypothyroidism or hyperthyroidism or goitre that causes dyspnoea.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Thyroid nodules, prolonged inflammations and similar conditions
- In the referral it is important to mention the circumstances which influence the degree of urgency: size of the nodule, local symptoms, suspicion of tumour malignancy and results of thyroid function tests

Follow-up

Decisions regarding the need for follow-up and the frequency of follow-up visits are made by local agreements on work distribution or on the basis of specialist physician evaluation.

Current care guidelines:

None

See also

enlarged thyroid

Working group:

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DIABETES

ICD disease classification

- E10 Insulin-dependent diabetes mellitus
- E11 Non-insulin dependent diabetes mellitus
- E12 Malnutrition-related diabetes mellitus
- E13 Other specified diabetes mellitus
- E14 Unspecified diabetes mellitus

Referral indications to specialised health care

Non-emergency treatment is organised according to the local work distribution between primary and specialised care based on current care guidelines. When the need for non-emergency consultation is evaluated, a need for urgent or emergency treatment (e.g., previously undiagnosed type 1 diabetes, severe organ complication of diabetes or previously undiagnosed type 2 diabetes with severe symptoms) must be excluded.

Follow-up

Decisions regarding the need for follow-up and the frequency of follow-up visits are made on the basis of current care guidelines with consideration of local agreements on work distribution between primary and specialised health care or on the basis of specialist physician's evaluation.

Current care guidelines (Diabetes)

www.kaypahoito.fi

Working group:

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Contact person:

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OBESITY

ICD disease classification

E66 Obesity

Examinations/functions within primary health care

- Lifestyle instructions

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Pharmacological treatment of severe obesity and evaluation of the need for bariatric surgery

Follow-up

Decisions regarding the need for follow-up and the frequency of follow-up visits are made on the basis of current care guidelines with consideration of local agreements on work distribution between primary and specialised health care or on the basis of specialist physician's evaluation.

Current care guidelines (Adult obesity)

www.kaypahoito.fi

Working group:

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SURGICAL TREATMENT OF MORBID OBESITY

ICD-10 Code

E66 Obesitas (obesity)

Referral from primary health care to specialised medical care is based on the Current Care Guidelines for Adult Obesity. Organisation of bariatric surgery requires a number of surgeries that is sufficient for both the surgeon and the operational unit. The Ministry of Social Affairs and Health follows up the treatments annually.

Primary health care

Obesity and bariatric surgery must be assessed from various perspectives and on a multi-scientific basis. Treatment must be carried out in seamless cooperation between primary health care and specialised medical care.

Referral of a patient to surgical assessment

Referral to surgical assessment is based on reports by an endocrinologist or an experienced doctor of internal medicine with sufficient knowledge of the field. Moreover, there must be an assessment of the patient's mental state. The afore-mentioned assessments must be recorded in the patient documents. The required grounds for a referral to surgical assessment is a summary of the follow-up and measures.

- The patient has received conservative obesity treatment for at least six months, during which the results have been recorded and followed up and the findings have been included in an annex to the referral.
- The total health status of the patient has been examined and factors affecting the potential surgery have been recorded and treated - the ICD code and place of treatment have been recorded.
- The patient has at least 50 points in the point system.

Point system

BMI 45 kg/m ² or greater	50 p
BMI 35–44.9	40 p
Diabetes/ arterial hypertension/ Musculoskeletal disorder/sleep apnoea/other	10 p

Criteria for access to non-emergency surgery in specialised medical care

The grounds for surgery are determined according to an individual evaluation. The surgery should be expected to be of benefit for the treatment of the patient's obesity and related health problems and, therefore, the decision to operate should always consider the assessment of the outcome of conservative treatment as well as the assessment of need for care and rehabilitation after the surgery. The above-mentioned circumstances and the factors accruing points must be recorded both in the decision to operate and in the epicrisis for the purpose of evaluation and follow-up of bariatric surgery.

Current care guidelines (Adult Obesity)

www.kaypahoito.fi

Working group:

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DYSLIPIDEMIAN*

ICD disease classification

E78 Disorders of lipoprotein metabolism and other dyslipidaemias

Examinations/functions within primary health care

- The patient does not, in general, benefit from specialist consultations, if the patient has regular, uncomplicated hyperlipidaemia.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Familial hypercholesterolaemia (high concentration of cholesterol in the blood) or justified suspicion of familial hypercholesterolaemia
- Severe hyperlipidaemia that does not respond well to treatment; especially for initiation of combination pharmacotherapy.

Follow-up

Decisions regarding the need for follow-up and the frequency of follow-up visits are made on the basis of current care guidelines with consideration of local agreements on work distribution between primary and specialised health care or on the basis of specialist physician's evaluation.

Current care guidelines (Dyslipidaemias)

www.kaypahoito.fi

Working group:

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Contact person:

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* Occurrence of abnormal lipoproteins (e.g., cholesterol combined with proteins) in the blood.

COELIAC DEASES

ICD disease classification

K90.0 Coeliac disease

Examinations/functions within primary health care

- Diagnostics and therapy may also be carried out within the primary health care, if this is in compliance with the regional work distribution.
- If the patient is symptom-free and a therapy response has been documented, the patient does not, as a general rule, benefit from consultations within specialised health care.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation is considered, it is important to note that if the patient has severe symptoms, severe malabsorption or there is a suspicion of lymphoma, urgent referral is required.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

Diagnosis, therapy and follow-up of treatment results, when

- the patient has symptoms and laboratory results that are compatible with coeliac disease

Follow-up within specialised health care

- Coeliac disease that responds poorly to treatment
- Poor treatment response

Current care guidelines (Coeliac disease)

www.kaypahoito.fi

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Yhteyshenkilöt:

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COLON POLYP*

ICD disease classification

B13 Neoplasmata benigna organorum digestiorum (benign neoplasm of other and ill-defined parts of the digestive system)

Examinations/functions within primary health care

On the basis of the regional work distribution, endoscopy of the gastrointestinal canal (gastroscopy and colonoscopy) may also be performed in primary health care. An example is long-term follow-up after polypectomy.

Information needed for non-emergency referral to specialised health care and referral indications

When considering the need for non-emergency consultation, a diagnosis of cancer or suspicion of cancer require urgent referral.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- Diagnosis or suspicion of an adenoma (benign glandular tumour) which has not been removed

Follow-up within specialised health care

- Diagnosis of an adenoma which has not been removed
- Follow-up of patient with colon adenoma

Current care guideline (Endoscopic examinations of the colon)
www.kaypahoito.fi

Working group:

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* Growth, usually with a stalk, of the mucous membrane due to inflammation or tumour

CHRONIC VIRAL HEPATITIS

ICD disease classification

B18 Hepatitis viralis chronica (chronic viral hepatitis)

Examinations/functions within primary health care

- A patient with chronic hepatitis C does not generally benefit from consultations within specialised health care, if the liver inflammation is histologically mild and the liver enzyme values are normal
- A patient with chronic hepatitis B does not generally benefit from consultations within specialised health care: no viral replication
- A patient continuously abusing drugs does not generally benefit from consultations within specialised health care; other contra-indications must also be considered.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultations within specialised health care is considered, alarming symptoms or liver failure require urgent referral for consultation.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- Evaluation or updating of therapeutic strategy
- Hepatitis C: Patients positive for HCV-RNA who have refrained from the use of intravenous drugs for at least one year
- Hepatitis B

Follow-up within specialised health care

- chronic hepatitis B, active disease

Current care guidelines:

None

Working group:

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IRON DEFICIENCY ANAEMIA

ICD disease classification

D50 Anaemia sideropenica (iron deficiency anaemia, chronic anaemia due to haemorrhage)

Examinations/functions within primary health care

- On the basis of the regional work distribution, endoscopy of the gastrointestinal canal (gastroscopy and colonoscopy) may also be performed in primary health care.
- The patient does not generally benefit from consultation within specialised health care, if the cause for the anaemia has been clarified reliably (e.g., profuse menstrual bleeding)

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with alarming symptoms and for patients older than 50 years.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For differential diagnosis when

- the reason for the anaemia is not clear and the patient is younger than 50 years (patients above 50 years of age with alarming symptoms need urgent referral)
- the cause for the anaemia needs to be established

Current care guideline (Endoscopic examination of the oesophagus, ventricle and duodenum, gastroscopy, 2) endoscopic examination of the colon)
www.kaypahoito.fi

Working group:

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GASTRO-OESOPHAGEAL REFLUX DISEASE

ICD disease classification

K21.0 Morbus refluxualis gastro-oesophageus
(gastro-oesophageal reflux disease)

Examinations/functions within primary health care

- In accordance with the regional work distribution, gastroscopy may also be performed within the primary health care.
- The patient does not generally benefit from specialist consultation, if 1) the patient's symptoms are of short duration and respond to treatment, or if 2) the patient remains symptom-free and has undergone sufficient diagnostic examinations.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- the patient has severe symptoms or daily symptoms
- the patient has unspecific respiratory and throat symptoms
- poor treatment response

Follow-up within specialised health care

- Complicated reflux disease: oesophageal stricture, ulceration
- Follow up of Barrett's dysplasia of the oesophageal mucous membrane (cf. Current care guidelines)

Current care guideline (Endoscopic examination of the oesophagus, ventricle and duodenum, gastroscopy, 2) endoscopic examination of the colon)
www.kaypahoito.fi

See also

oesophageal reflux disease

Working group:

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DYSKINESIA OF THE OESOPHAGUS

ICD disease classification

K22.4 Dyskinesia oesophagi (dyskinesia of oesophagus)

Examinations/functions within primary health care

- In accordance with the regional work distribution, gastroscopy may also be performed within the primary health care.
- The patient does not generally benefit from specialist consultation, if the patient's symptoms are transient or a diagnostic work-up has been performed previously and the patient has no need for treatment.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with alarming symptoms and for patients older than 50 years.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- the patient has chest pain and coronary artery disease has been excluded
- the patient is non-compliant

Current care guideline (Endoscopic examination of the oesophagus, ventricle and duodenum, gastroscopy, 2) endoscopic examination of the colon)

www.kaypahoito.fi

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DYSPEPSIA AND ULCER DISEASE

ICD disease classification

- K30 Dyspepsia
- K25 Ulcus ventriculi (gastric ulcer)
- K26 Ulcus duodeni (duodenal ulcer)

Examinations/functions within primary health care

- In accordance with the regional work distribution, gastroscopy may also be performed within the primary health care.
- The patient does not generally benefit from specialist consultation, if 1) the patient is under 55 years of age and has transient symptoms and a good treatment response, 2) the patient has been examined thoroughly and the symptoms persist

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with alarming symptoms and for patients older than 50 years.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

Differential diagnosis and treatment (Current care guidelines)

- Dyspepsia in patients older than 55 years
- Poor response to treatment of dyspepsia
- Problematic *Helicobacter pylori* infection (repeated eradication failures)
- Use of NSAID-medication and symptoms of dyspepsia

Follow-up within specialised health care

- Active gastric ulcer

Current care guideline

(Diagnosis and treatment of *Helicobacter pylori* infection)

www.kaypahoito.fi

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CROHN'S DISEASE (REGIONAL ENTERITIS) AND ULCERATIVE COLITIS

ICD disease classification

K50 Morbus Crohn (Crohn's disease, regional enteritis)

K51 Colitis ulcerosa (ulcerative colitis)

Examinations/functions within primary health care

- In accordance with the regional work distribution, colonoscopy may also be performed within the primary health care.
- The patient does not generally benefit from specialist consultation, if 1) the patient has collagen colitis or microscopic colitis and has no treatment problems, 2) the patient has proctitis, unless there are symptoms that do not respond to treatment, 3) the patient has ulcerative colitis and is symptom-free and has a colostomy because of the colitis.
- The follow-up of patients requiring immunosuppressive medication may take place in the primary health care, if the patient's condition is stable.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with alarming symptoms and for patients older than 50 years.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- Suspicion of chronic inflammatory enteritis or colitis

Follow-up within specialised health care

- Active colitis verified by colonoscopy
- Widespread Crohn's disease
- Extraintestinal manifestations
- Evaluation, initiation and follow-up of immunomodulatory medication
- Immunomodulatory treatments
- Follow-up of dysplasia related to chronic inflammatory colitis (cf. Current care guidelines)

Current care guideline (Endoscopic examinations of the colon)

www.kaypahoito.fi

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IRRITABLE BOWEL SYNDROME

ICD disease classification

K58 Syndroma intestini irritabilis (irritable bowel syndrome)

Examinations/functions within primary health care

- In accordance with the regional work distribution, colonoscopy may also be performed within the primary health care.
- The patient does not generally benefit from specialist consultation, if 1) the symptoms are mild and the diagnosis is unequivocal, 2) the patient is continuously symptomatic and has been examined thoroughly and repeatedly.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with alarming symptoms and for patients older than 50 years.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- the patient has the irritable bowel syndrome with diarrhoea
- the treatment response is poor

Current care guideline (Endoscopic examinations of the colon)

www.kaypahoito.fi

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OTHER FUNCTIONAL INTESTINAL DISORDERS

ICD disease classification

K59 Dysfunctionalis intestinalis (other functional intestinal disorders)

Examinations/functions within primary health care

- On the basis of the regional work distribution, endoscopy of the gastrointestinal canal (gastroscopy and colonoscopy) may also be performed in primary health care.
- The patient does not generally benefit from specialist consultation, if the patient's symptoms are chronic and the patient has been examined thoroughly.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with alarming symptoms and for patients older than 50 years.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- the diagnosis has not been established and the patient's symptoms continue or become worse

Current care guideline (Endoscopic examination of the oesophagus, ventricle and duodenum, gastroscopy, 2) endoscopic examination of the colon)
www.kaypahoito.fi

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ALCOHOLIC LIVER DISEASE

ICD disease classification

K70 Morbus hepatis alcoholicus (alcoholic liver disease)

Examinations/functions within primary health care

- The patient does not generally benefit from specialist consultation, if the clinical situation is stable.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with alarming symptoms and for patients older than 50 years.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- the patient has symptoms or signs compatible with chronic liver disease

Follow-up within specialised health care

- the patient is non-compliant

Current care guidelines:

None

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CHRONIC HEPATITIS

ICD disease classification

- K73 Chronic hepatitis
- K74.3 Primary biliary cirrhosis
- K73.2 Autoimmune hepatitis
- K83 Sclerosing cholangitis

Examinations/functions within primary health care

- The patient does not generally benefit from specialist consultation, if the disease is inactive and the patient is symptom-free and not on medication.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with acute symptoms or whose diagnosis has not been established.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- the liver disease in only mildly symptomatic or asymptomatic

Follow-up within specialised health care

- Symptomatic patients
- Signs of active disease
- Patients on immunosuppressive treatment
- Non-symptomatic sclerosing cholangitis (inflammation of the bile ducts that typically causes narrowing and closure of the bile ducts due to connective tissue formation)

Current care guidelines:

None

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CIRRHOSIS OF THE LIVER

ICD disease classification

K74 Fibrosis et cirrhosis hepatis (Fibrosis and cirrhosis of the liver)

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with acute symptoms or whose diagnosis has not been established.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- symptoms recur after a period of disease stability
- the patients needs evaluation for operability

Follow-up within specialised health care

- Complicated cirrhosis (brain disease, i.e., encephalopathy, recurrent bleeding from widened veins [varicosities of the oesophagus], accumulation of fluid in the abdomen, hepatorenal syndrome, i.e., kidney failure due to severe liver failure)

Current care guidelines:

None

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FATTY LIVER DISEASE

ICD disease classification

K76.0 Degeneratio adiposa hepatis non alibi classificata
(fatty [change of] liver, not elsewhere classified)

Examinations/functions within primary health care

- The patient does not generally benefit from specialist consultation, if the liver enzyme values are only slightly elevated and the diagnosis is certain.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

Examinations/functions within specialised health care

For diagnosis and treatment

- the value of alanine aminotransferase (ALAT) has been clearly above the upper reference value (more than threefold) for more than 6 months

Follow-up within specialised health care

- Disease progression or suspicion of disease progression

Current care guidelines:

None

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CHRONIC PANCREATITIS

ICD disease classification

- K86.08 Pancreatitis chronica alcoholica
(alcohol-induced chronic pancreatitis)
- K86.1 Alia pancreatitis chronica (other chronic pancreatitis)

Examinations/functions within primary health care

- On the basis of regional work distribution, patients may also be followed up within the primary health care.
- The patient does not generally benefit from specialist consultation, if the patient is asymptomatic and the diagnosis is certain.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with severe malabsorption or severe pain.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment

- the patient has mild symptoms and abnormal laboratory values or imaging results
- symptoms become worse

Follow-up within specialised health care

- Symptomatic patients
- patients with (complicated) diabetes

Current care guidelines:

None

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SHORT-BOWEL SYNDROME OR SIMILAR CONDITIONS

ICD disease classification

K90.9 Malabsorptio intestinalis non specificata
(intestinal malabsorption, unspecified)

Examinations/functions within primary health care

- The patient does not generally benefit from specialist consultation, if the disease is mild and the patient does not have malabsorption.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation within specialised health care is considered, urgent referral is needed for patients with a new diagnosis or severe malabsorption.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment when

- the patient has symptoms

Follow-up within specialised health care

- Widespread disease
- Patient with symptoms

Current care guidelines:

None

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HIGH LIVER ENZYME VALUES

ICD disease classification

R85.0 Reperta abnormia in speciminibus ex organis digestoriis et cavitate abdominali (abnormal findings in specimens from digestive organs and abdominal cavity; abnormal enzyme values)

Examinations/functions within primary health care

- The patient does not generally benefit from specialist consultation, if 1) the patient is asymptomatic and the values have been only slightly above the upper reference value (e.g., the alanine aminotransferase and the alkaline phosphatase values less than 1.5 times above the upper reference limit) for less than 6 months, 2) the patient has undergone sufficient examinations previously and there has been no progression.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For differential diagnosis when

- there are indications that the patient has a chronic liver condition
- liver biopsy is being considered

Current care guidelines:

None

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ABNORMAL RESULT OF LIVER IMAGING

ICD disease classification

R93.2 Reperta abnormia ex imagine diagnostica hepatitis et ductuum biliarium
(abnormal findings on diagnostic imaging of liver and biliary tract)

Examinations/functions within primary health care

- The patient does not generally benefit from specialist consultation, if 1) the finding is a cyst (fluid-containing abnormal cavity) or a haemangioma (blood-vessel tumour) and the diagnosis is certain, 2) the diagnosis has been confirmed by follow-up.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation is assessed, a suspicion of a malignant tumour requires urgent referral.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For differential diagnosis when

- there is a suspicion of a parenchyme disease (condition relating to the basic structure of the liver), an adenoma (benign tumour) or focal nodular hyperplasia (superfluous regional growth of the liver)
- a cyst (abnormal cavity containing fluid) or a haemangioma (blood-vessel tumour) is suspected and requires confirmation

Follow-up within specialised health care

- The diagnosis has not been settled

Current care guidelines:

None

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LIVER TRANSPLANT STATUS

ICD disease classification

Z94.4 Liver transplant status

Examinations/functions within primary health care

- Long-term follow-up of all patients is carried out in specialised health care.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

Follow-up within specialised health care

- Long-term follow-up of all patients is carried out in specialised health care.

Current care guidelines:

None

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INDICATIONS FOR NON-EMERGENCY EXAMINATIONS AND TREATMENT WITHIN SPECIALISED HEALTH CARE: HAEMATOLOGY

When the need for non-emergency referral to specialised health care in the field of haematology is considered, observe that most of the diseases within haematology require urgent or acute referral to specialised health care. Usually, it is possible to evaluate the urgency of the treatment or follow-up only after a diagnosis has been established. Some examples of indications of non-emergency referrals to consultation within specialised health care are:

ICD disease classification

Z83.2 Family history of diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (e.g., anaemia, haemophilia and thrombophilia)

R72 Abnormality of white blood cells, not elsewhere classified

D69.6 Thrombocytopenia, unspecified

- For diagnosis of mild chronic leukopenia (reduced amount of white blood cells), unless the reason has been established by examinations in the primary health care.
- For the diagnosis of mild stable thrombocytopenia (reduced amount of platelets in the blood, more than $100 \times 10^9/l$), unless the reason has been established by examinations in the primary health care.
- Management of the treatment and follow-up of haematological diseases

Current care guidelines:

None

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ASYMPTOMATIC CHRONIC LYMPHOCYTIC LEUKAEMIA

ICD disease classification

C91.1 Leukaemia lymphocytica chronic (chronic lymphocytic leukaemia)

Examinations/functions within primary health care

- The patient, especially if he/she is elderly, does not generally benefit from specialist consultation, if the disease is recent: follow-up at intervals of 1-4 (-6) months is appropriate, with consultation, as needed.
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Assessment of the need for diagnostic and therapeutic interventions, as the disease progresses

Follow-up within specialised health care

- At intervals of 1-4 (-6) months

Current care guidelines:

None

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POLYCYTHAEMIA VERA*

ICD disease classification

D45 Polycythaemia vera

Examinations/functions within primary health care

- Asymptomatic, elderly patients who have received, e.g., radio phosphorus therapy may be followed-up in primary health care at intervals of 1-3 months, with consultation, as needed.
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Diagnosis and determination of time for treatment

Follow-up within specialised health care

- At intervals of 1-3 months, as appropriate

Current care guidelines:

None

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* Condition of overproduction in the bone marrow due to unknown reasons. Leads typically to a high number of red blood cells, white blood cells and platelets in the blood

MYELODYSPLASTIC SYNDROMES*

ICD disease classification

D46 Myelodysplastic syndromes

Examinations/functions within primary health care

- Mild and slowly progressive conditions, especially of elderly patients, may be followed-up in primary health care at intervals of 1-4-6 months, with consultation, as needed.
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Diagnosis and assessment of need for therapy

Follow-up within specialised health care

- At intervals of 1-3-4 months

Current care guidelines:

None

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* Syndromes due to changes in the function and structure of the bone marrow.

PRIMARY MYELOFIBROSIS*

ICD disease classification

D47.1 Myelofibrosis

Examinations/functions within primary health care

- Mild and slowly progressive conditions, especially of elderly patients, may be followed-up in primary health care at intervals of 2-4-6 months, with consultation, as needed.
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Diagnosis and determination of time for treatment

Follow-up within specialised health care

At intervals of 1-3-4 months

Current care guidelines:

None

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* Bone marrow is replaced by fibrous tissue.

ASYMPTOMATIC MONOCLONAL¹ GAMMOPATHY² OR INCIPIENT MULTIPLE MYELOMA³

ICD disease classification

D47.2 Monoclonal gammopathy

C90.0 Multiple myeloma

Examinations/functions within primary health care

- The patient, especially if he/she is elderly, does not generally benefit from specialist consultation, if the disease is recent: follow-up in the primary health care at intervals of 1-4 (-6) months is appropriate, with consultation, as needed.
- Other myeloproliferative disorders and amyloidosis have been considered
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Assessment of the need for diagnostic and therapeutic interventions, as the disease progresses

Follow-up within specialised health care

- At intervals of 1-4 (-6) months

Current care guidelines:

None

Working group:

Elli Koivunen Pirkanmaa Hospital District, Anders Almqvist Vaasa Central Hospital, Tuomo Honkanen Central Hospital of Päijät-Häme, Kalevi Oksanen Central Hospital of Kanta-Häme, Jorma Opas Central Hospital of Savonlinna, Tapani Ruutu Hospital District of Helsinki and Uusimaa, Pirjo Koistinen Oulu University Hospital, Tapio Nousiainen Kuopio University Hospital, Kari Remes Turku University Hospital, Kari Pietilä Pirkanmaa Hospital District

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¹ Produced by one clone of cells

² Pathological alteration in the proteins that function as antibodies in the blood

³ Malignant bone marrow tumour

ESSENTIAL THROMBOCYTHAEMIA*

ICD disease classification

D47.3 Thrombocythaemia essentialis
(essential [haemorrhagic] thrombocythaemia)

Examinations/functions within primary health care

- Asymptomatic, elderly patients who have received, e.g., radio phosphorus therapy may be followed-up in primary health care at intervals of 1-3 months, with consultation, as needed.
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Diagnosis and determination of time for treatment

Follow-up within specialised health care

- At intervals of 1-4 months, depending on risk group and the individual case.

Current care guidelines:

None

Working group:

Elli Koivunen Pirkanmaa Hospital District, Anders Almqvist Vaasa Central Hospital, Tuomo Honkanen Central Hospital of Päijät-Häme, Kalevi Oksanen Central Hospital of Kanta-Häme, Jorma Opas Central Hospital of Savonlinna, Tapani Ruutu Hospital District of Helsinki and Uusimaa, Pirjo Koistinen Oulu University Hospital, Tapio Nousiainen Kuopio University Hospital, Kari Remes Turku University Hospital, Kari Pietilä Pirkanmaa Hospital District

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* Rare condition where the bone marrow has an overproduction of platelets.

CHRONIC CYTOPENIA¹

ICD disease classification

- D55 Anaemia due to enzyme disorders
- D56 Thalassaemia²
- D57 Sickle-cell disorders
- D58 Hereditary spherocytosis and other hereditary haemolytic anaemias³
- D59 Acquired haemolytic anaemia
- D69.3 Idiopathic thrombocytopenic purpura⁴
- D70 Agranulocytosis⁵

Examinations/functions within primary health care

- Asymptomatic patients with a mild disease may, depending on the individual case, be followed-up in primary health care at intervals of 1-3-6 months.
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Diagnosis and assessment of need for therapy

Current care guidelines:

None

Working group:

Elli Koivunen Pirkanmaa Hospital District, Anders Almqvist Vaasa Central Hospital, Tuomo Honkanen Central Hospital of Päijät-Häme, Kalevi Oksanen Central Hospital of Kanta-Häme, Jorma Opas Central Hospital of Savonlinna, Tapani Ruutu Hospital District of Helsinki and Uusimaa, Pirjo Koistinen Oulu University Hospital, Tapio Nousiainen Kuopio University Hospital, Kari Remes Turku University Hospital, Kari Pietilä Pirkanmaa Hospital District

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¹ Low number of blood cells

² Hereditary form of anaemia characterised by poor formation of haemoglobin

³ Group of anaemias due to premature breakage of red blood cells

⁴ Purple skin changes in connection with low platelet count for unknown reasons

⁵ Lack of granular leukocytes in the blood for any reason

HAEMOPHILIA AND THROMBOPHILIA

ICD disease classification

D65-69 Coagulation defects, purpura and other haemorrhagic conditions

Examinations/functions within primary health care

- Follow-up of mild cases as appropriate
- If there is uncertainty whether the patient should be referred to specialised health care or whether examinations may be carried out within primary health care, it is appropriate to consult a haematologist in specialised health care by telephone or in writing.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Diagnosis and assessment of need for therapy

Follow-up within specialised health care

- according to regional work distribution

Current care guidelines:

None

Working group:

Elli Koivunen Pirkanmaa Hospital District, Anders Almqvist Vaasa Central Hospital, Tuomo Honkanen Central Hospital of Päijät-Häme, Kalevi Oksanen Central Hospital of Kanta-Häme, Jorma Opas Central Hospital of Savonlinna, Tapani Ruutu Hospital District of Helsinki and Uusimaa, Pirjo Koistinen Oulu University Hospital, Tapio Nousiainen Kuopio University Hospital, Kari Remes Turku University Hospital, Kari Pietilä Pirkanmaa Hospital District

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ASYMPTOMATIC PERSON POSITIVE FOR HIV

ICD disease classification

R75 Laboratory evidence of human immunodeficiency virus [HIV]

Z21 Asymptomatic human immunodeficiency virus [HIV] infection status

Information needed for non-emergency referral to specialised health care and referral indications

Diagnosis and treatment management require almost always urgent referral.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- The referring physician has agreed with the receiving party within specialised health care on non-emergency referral.

Current care guidelines:

None

Working group:

Jukka Lumio Pirkanmaa Hospital District, Kari Pietilä Pirkanmaa Hospital District

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POOR CONDITION DUE TO UNKNOWN REASONS OF PERSON ARRIVING FROM THE TROPICS, INCLUDING IMMIGRANTS

ICD disease classification

Z20 Contact with and exposure to communicable diseases

Examinations/functions within primary health care

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency referral is evaluated, due consideration has to be taken of the possibility that the patient may require urgent or emergency consultation within specialised health care.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment when the patient has

- eosinophilia (excess amount of eosinophilic leukocytes in the blood)
- high values of liver function tests
- parasites in the feces

Current care guidelines:

None

Working group:

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SUSCEPTIBILITY TO INFECTIONS OF LONG DURATION

ICD disease classification

There is no common diagnosis code or definition relating to recurrent infections.

Examinations/functions within primary health care

- The patient does not generally benefit from specialist consultation, if the patient does not have any clear recurrence of infections or if the infections have been mild.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency referral is evaluated, due consideration has to be taken of the possibility that the patient may require urgent or emergency consultation within specialised health care.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

For diagnosis and treatment when the patient has

- currently a period of recurrent infections ongoing or if the infections have been severe.

Current care guidelines:

None

Working group:

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STABLE CORONARY HEART DISEASE OR SUSPICION OF CORONARY HEART DISEASE AND LOW-RISK CORONARY INCIDENT WITHOUT ST-ELEVATIONS

ICD disease classification

I25 Morbus ischaemicus cordis chronicus (chronic ischaemic heart diseases)

I20 Angina pectoris

Examinations/functions within primary health care

- Echocardiography should not be performed if the patient has a normal electrocardiogram (ECG) not is there a history of heart infarction, nor are there signs or symptoms of heart failure, valve disease or of hypertrophic cardiomyopathy (overgrowth of heart muscle)
- Exercise testing should not be carried out to evaluate the risk of patients whose other illnesses does not allow revascularisation (re-establishing the blood circulation through coronary artery bypass grafting or percutaneous transluminal coronary arterioplasty).

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency referral to specialised health care is evaluated, conditions requiring urgent or emergency treatment, e.g., coronary incident and accelerating angina must be excluded. A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If invasive diagnostic procedures are performed, the patient must consent to percutaneous procedures or surgery. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

Indications for echocardiography

- Murmur apparently caused by valvular disease
- Assessment of left ventricular (LV) function of patients 1) who have a history of myocardial infarction, 2) whose ECG shows pathological Q-waves, 3) who have signs or symptoms compatible with heart failure or 4) with serious ventricular arrhythmias.

Indications for exercise testing

- For diagnostic purposes of patients with a medium risk of coronary heart disease (based on age, gender and symptoms)
- For evaluation of the risk of patients who are able to perform the exercise test

Indications for angiography

- Angina pectoris symptom that disturbs the daily life of the patient
- Patients evaluated as being high-risk on clinical basis or on the basis of non-invasive tests, regardless of symptoms

- Stable angina pectoris and heart failure
- Non-invasive tests have left the diagnosis open or the patient is unable to perform the diagnostic tests (e.g., due to other diseases) and the benefits of a final diagnosis exceed the risks of coronary angiography.

Current care guidelines (Coronary event: unstable angina pectoris and cardiac infarction without ST elevation-risk assessment)

www.kaypahoito.fi

See also

cardiac surgery: coronary heart disease

Working group:

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VALVULAR DISEASE OR SUSPICION OF VALVULAR DISEASE

ICD disease classification

I34-37 Vitia valvae mitralis, aortae, tricuspidalis et pulmonalis non rheumatica (nonrheumatic diseases of the mitral, aortic, tricuspid and pulmonary valves)

Examinations/functions within primary health care

- The patient does not in general benefit from consultation within specialised health care: patient is symptom-free, but has mild valvular disease, normal function of the left ventricle and no changes in the clinical situation.

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency referral is evaluated, highly symptomatic valvular diseases require always urgent or emergency consultation.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Double-checking the diagnosis and determination of degree of severity
- Patient with known valvular disease: symptoms appear or become worse

Examinations/functions within specialised health care

Indications for invasive examinations:

- Patient has symptoms and is known to have or suspected of having severe valvular disease
- Patient is symptom-free but is known to have severe valvular disease and surgery is being considered

Follow-up within specialised health care

- The valvular disease is moderate or severe and the patient is operable (considering the patient's age, other diseases and general condition)

Current care guidelines:

None

See also

cardiac surgery: valvular disease

Working group:

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Satakunta, Matti Rekiaro Central Hospital of Seinäjoki, Eila Kujansuu, Department of Social Services and Health Care of the City of Tampere, Liisa-Maria Voipio-Pulkki, Association of Finnish Local and Regional Authorities, Kari Pietilä Pirkanmaa Hospital District

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PAROXYSMAL TACHYCARDIA (SUPRAVENTRICULAR TACHYCARDIAS) INDICATIONS FOR INVASIVE TREATMENT

ICD disease classification

I47 Paroxysmal tachycardia

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation to specialised health care is evaluated, highly symptomatic patients require urgent consultation.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Recurrent symptomatic supraventricular tachycardia
- Supraventricular tachycardia is the predominant cardiac rhythm
- Supraventricular tachycardia, one episode with serious symptoms
- Supraventricular tachycardia in patients who require absolute prevention of recurrent episodes
- Ventricular preexcitation and symptomatic arrhythmia (Wolff-Parkinson-White syndrome)

Working group:

Saila Vikman Tampere University Hospital, Kari Niemelä Tampere University Hospital, Ilkka Tierala Helsinki University Hospital, Lauri Toivonen Helsinki University Hospital, Johanna Kuusisto Kuopio University Hospital, Mikko Pietilä Turku University Central Hospital, Matti Niemelä Oulu University Hospital, Pekka Raatikainen Oulu University Hospital, Antti Ylitalo, Central Hospital of Satakunta, Matti Rekiaro Central Hospital of Seinäjoki, Eila Kujansuu, Department of Social Services and Health Care of the City of Tampere, Liisa-Maria Voipio-Pulkki, Association of Finnish Local and Regional Authorities, Kari Pietilä Pirkanmaa Hospital District

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ATRIAL FLUTTER AND ATRIAL FIBRILLATION

ICD disease classification

I48 Atrial fibrillation

Atrial flutter (specific ICD-code pending)

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Recurrent (paroxysmal) episodes of atrial fibrillation or atrial flutter and medication with some other antiarrhythmic medication than a beta blocker is planned
- Atrial flimmer or atrial fibrillation and suspicion of abnormality of heart structure
- For deciding on management strategy of atrial fibrillation or atrial flutter

Examinations/functions within specialised health care

Indications for invasive examinations:

- Atrial fibrillation that gives severe symptoms and is permanent or paroxysmal and that cannot be treated with medication and where catheter ablation is considered suitable
- Atrial fibrillation that requires medication but the medication causes bradycardia and pacemaker treatment is considered suitable
- Rapid atrial fibrillation that cannot be reduced sufficiently with medication and where ablation of the atrioventricular junction and pacemaker treatment are considered suitable
- Recurrent atrial fibrillation with severe symptoms
- Recurrent atrial fibrillation that does not respond to pharmacotherapy

Current care guidelines (atrial fibrillation): www.kaypahoito.fi

Working group:

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HEART FAILURE OR SUSPICION OF HEART FAILURE

ICD disease classification

I50 Insufficiencia cordis (heart failure)

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation to specialised health care is evaluated, patients with newly-onset heart failure or heart failure that rapidly becomes worse always require urgent or emergency referral to specialised health care.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Confirmation of the diagnosis for patients who have symptoms compatible with heart failure and a condition that predisposes to heart failure (diabetes, chronic hypertension, coronary heart disease, use of cardiotoxic medicines, familial history of cardiomyopathy or history of rheumatic fever)
- Confirmation of the diagnosis for patients who have symptoms or signs compatible with heart failure together with abnormal findings in the ECG or chest radiogram or high concentrations of natriuretic peptide in the blood.
- Presence of heart failure or dysfunction of the left ventricle and altered clinical state without any obvious transient reason.

Examinations/functions within specialised health care

Indications for coronary angiography

- Stable angina pectoris and heart failure
- Presence of left ventricle dysfunction with no other obvious reason and the patient is suitable for revascularization (reconstitution of the blood circulation by coronary artery bypass grafting [CABG] or percutaneous transluminal coronary angioplasty [PTCA])

Follow-up within specialised health care

- Severe heart failure and surgical treatment or mechanical support is considered
- Heart transplant patients
- Multiproblematic patients
- Patients with serious ventricular arrhythmias
- Patients with a pacemaker or automatic implantable cardioverter-defibrillator

Current care guidelines:

None

Working group:

Saila Vikman Tampere University Hospital, Kari Niemelä Tampere University Hospital, Ilkka Tierala Helsinki University Hospital, Lauri Toivonen Helsinki University Hospital, Johanna Kuusisto Kuopio University Hospital, Mikko Pietilä Turku University Central Hospital, Matti Niemelä Oulu University Hospital, Pekka Raatikainen Oulu University Hospital, Antti Ylitalo, Central Hospital of Satakunta, Matti Rekiaro Central Hospital of Seinäjoki, Eila Kujansuu, Department of Social Services and Health Care of the City of Tampere, Liisa-Maria Voipio-Pulkki, Association of Finnish Local and Regional Authorities, Kari Pietilä Pirkanmaa Hospital District

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EPISODES OF CARDIAC ARRHYTHMIA

ICD disease classification

R00 Abnormalities of heart beat (abnormalities of heart beat)

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation to specialised health care is evaluated, patients who often need urgent evaluation within specialised care must be taken into consideration. Examples of such patients are those who have arrhythmias causing serious symptoms, e.g., heart failure or impaired consciousness.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Recurrent symptomatic tachycardia
- Broad complex tachycardia
- Preexcitation seen on ECG, delta wave

Current care guidelines:

None

Working group:

Saila Vikman Tampere University Hospital, Kari Niemelä Tampere University Hospital, Ilkka Tierala Helsinki University Hospital, Lauri Toivonen Helsinki University Hospital, Johanna Kuusisto Kuopio University Hospital, Mikko Pietilä Turku University Central Hospital, Matti Niemelä Oulu University Hospital, Pekka Raatikainen Oulu University Hospital, Antti Ylitalo Central Hospital of Satakunta, Matti Rekiaro Central Hospital of Seinäjoki, Eila Kujansuu Department of Social Services and Health Care of the City of Tampere, Liisa-Maria Voipio-Pulkki, Association of Finnish Local and Regional Authorities, Kari Pietilä Pirkanmaa Hospital District

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CARDIAC MURMUR

ICD disease classification

R01 Murmura cardiaca et alii soni cardiaci (cardiac murmurs and other cardiac sounds)

Examinations/functions within primary health care

- The patient does not in general benefit from consultation within specialised health care : symptom-free adult who has a cardiac murmur that has been found to be innocent, 2) determination of the characteristics of the murmur does not affect patient treatment

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation to specialised health care is evaluated, some patients require urgent consultation within specialised health care. This concerns patients with, e.g., a newly diagnosed cardiac murmur and heart failure and patients with transient loss on consciousness.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Murmurs and cardiac and respiratory symptoms
- Diastolic murmur
- Symptom-free patient with abnormal findings on chest radiography, ECG or physical examination
- Cardiac disease cannot be excluded within primary health care

Current care guidelines:

None

Working group:

Saila Vikman Tampere University Hospital, Kari Niemelä Tampere University Hospital, Ilkka Tierala Helsinki University Hospital, Lauri Toivonen Helsinki University Hospital, Johanna Kuusisto Kuopio University Hospital, Mikko Pietilä Turku University Central Hospital, Matti Niemelä Oulu University Hospital, Pekka Raatikainen Oulu University Hospital, Antti Ylitalo, Central Hospital of Satakunta, Matti Rekiaro Central Hospital of Seinäjoki, Eila Kujansuu, Department of Social Services and Health Care of the City of Tampere, Liisa-Maria Voipio-Pulkki, Association of Finnish Local and Regional Authorities, Kari Pietilä Pirkanmaa Hospital District

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SYNCOPE AND COLLAPSE

ICD disease classification

R55 Syncope and collapse

Information needed for non-emergency referral to specialised health care and referral indications

When the need for non-emergency consultation to specialised health care is evaluated, patients who are known to have a cardiac disease or whose symptoms are associated with arrhythmias require urgent specialist consultation.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Recurrent episodes of syncope for unknown reasons
- Professional drivers, pilots etc. who work in a dangerous profession, already after first syncope episode

Current care guidelines:

None

Working group:

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PATIENTS WITH A PACEMAKER OR AUTOMATIC IMPLANTABLE CARDIOVERTER-DEFIBRILLATOR, ADULT PATIENTS WITH CONGENITAL HEART DISEASE AND PATIENTS WITH CARDIOMYOPATHY

ICD disease classification

- Z95.0 Presence of pacemaker
- I42 Dilating cardiomyopathy (heart muscle disease that causes dilatation of the heart)
- Q20-24 Malformationes congenitae cordis (congenital malformations of the heart)

Examinations/functions within primary health care

- Follow-up of these patients shall take place within specialised health care

Follow-up within specialised health care

- Patients with cardiac pacemaker: interval between follow-up visits 3 – 24 months, depending on type of pacemaker and implantation of the device
- Patients with automatic implantable cardioverter-defibrillator: interval between follow-up visits 3 – 6 months, depending on the cardiac disease, time of implantation and function of the pacemaker
- Adult patients with congenital heart disease and patients with cardiomyopathy: the treating physician determines the follow-up interval individually

Current care guidelines:

Under preparation.

Working group:

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NEPHROTIC SYNDROME

ICD disease classification

N00 Acute nephritic syndrome

N04 Nephrotic syndrome*

Examinations/functions within primary health care

Information needed for non-emergency referral to specialised health care and referral indications

When non-emergency referral for consultation is considered, it is important to exclude a need for urgent consultation to specialised health care. When the nephrotic syndrome emerges acutely, immediate consultation is often needed.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- All patients are referred to specialised health care

Current care guidelines:

None

Working group:

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* Syndrome associated with various kidney diseases due to a disorder affecting the glomerular basement membrane. It is characterised by profuse proteinuria, low concentration of albumin in the blood and oedema.

RENAL MANIFESTATIONS OR SUSPICION OF RENAL MANIFESTATIONS RELATED TO GENERAL ILLNESSES (DIABETES, RHEUMATIC DISEASES) OR TREATMENT OF GENERAL ILLNESSES

ICD disease classification

- N08.5 Morbositates glomerulares in morbositatibus systemicis textus connectivi (glomerular disorders in systemic connective tissue disorders)
- N08.39 Glomerular disorders in diabetes mellitus; other on undefined diabetic renal disease

Examinations/functions within primary health care

- The patient does not in general benefit from consultation within specialised health care, if the patient has a severe general illness and the renal condition is not decisive with regard to the patient's prognosis.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Proteinuria
- Impaired renal function
- In diabetic nephropathy, if despite intensified treatment albuminuria increases or the glomerular filtration rate declines or a differential diagnostic or significant therapeutic problem emerges

Current care guidelines (Diabetic nephropathy)

www.kaypahoito.fi

Working group:

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RENAL FAILURE FOR UNKNOWN REASON

ICD disease classification

N18.9 Insufficiencia renalis chronica non specificata
(chronic renal failure, unspecified)

N19 Insufficiencia renalis non specificata (unspecified renal failure)

Examinations/functions within primary health care

- The patient does not in general benefit from consultation within specialised health care, if the patient has a several illnesses and the renal condition is not decisive with regard to the patient's prognosis.

Information needed for non-emergency referral to specialised health care and referral indications

When non-emergency referral for consultation is considered, it is important to exclude a need for emergency consultation to specialised health care. Acute renal failure requires emergency consultation.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- For diagnosis, when a specific diagnosis is relevant with regard to treatment
- Treatment management

Current care guidelines:

None

Working group:

Heikki Saha Pirkanmaa Hospital District, Eero Honkanen Hospital District of Helsinki and Uusimaa, Kai Metsärinne Turku University Central Hospital, Pauli Karhapää Kuopio University Hospital, Risto Ikäheimo Oulu University Hospital, Antero Helanterä Central Hospital of Päijät-Häme, Markku Asola Central Hospital of Satakunta, Carola Gönkhagen-Riska Hospital District of Helsinki and Uusimaa, Kari Pietilä Pirkanmaa Hospital District

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PROGRESSIVE RENAL FAILURE

ICD disease classification

N19 Insufficiencia renalis non specificata (unspecified renal failure)

Examinations/functions within primary health care

- The patient does not in general benefit from consultation within specialised health care, if the patient has a several illnesses and the renal condition is not decisive with regard to the patient's prognosis.

Information needed for non-emergency referral to specialised health care and referral indications

When non-emergency referral for consultation is considered, it is important to exclude a need for emergency consultation to specialised health care, especially if the renal failure progresses rapidly.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Treatment and follow-up of these patients take usually place in specialised health care.

Current care guidelines:

None

Working group:

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PROTEINURIA

ICD disease classification

- R80 Proteinuria isolata (isolated proteinuria with no symptoms)
- N39.1 Proteinuria persistens non specificata (persistent proteinuria, unspecified)

Examinations/functions within primary health care

- The patient does not in general benefit from consultation within specialised health care, if the amount of proteinuria is less than 1 gram per 24 hours.

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Proteinuria exceeding 1 gram per 24 hours
- Proteinuria and haematuria(blood in the urine)

Current care guidelines:

None

Working group:

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PATIENTS REQUIRING CONTINUOUS FOLLOW-UP WITHIN SPECIALISED HEALTH CARE

ICD disease classification

Z94.0 Kidney transplant status

Z49 Care involving dialysis

N08 Glomerular disorders in diseases classified elsewhere
(e.g., M31.3 Wegener's granulomatosis and M32.1 Systemic lupus erythematosus with organ or system involvement)

- Follow-up of active renal disease with medication that impairs the immune response

N18.0 End-stage renal disease, if the patient is considered to require dialysis treatment.

Current care guidelines:

None

Working group:

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PATIENT GROUPS REQUIRING NON-EMERGENCY CONSULTATIONS WITHIN SPECIALISED HEALTH CARE

Information needed for non-emergency referral to specialised health care and referral indications

When non-emergency referral for consultation is considered, it is important to consider that patients with a rheumatic disease who have acute or severe symptoms or who are pregnant often require urgent or emergency consultation to specialised health care.

A requirement for non-emergency referral for consultation to specialised health care is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from consultation or treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., treatment compliance), would not benefit from the consultation or treatment. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Fever and symptoms related to the musculoskeletal system, M00-M13, M30-M36, R50
- Acute polyarthritis (rheumatoid arthritis), M05-M06
- Suspicion of acute spondylitis or closely related arthritis (spondylarthritis) M02, M03, M07, M45-46, e.g., ankylosing spondylitis, psoriatic arthritis, fulminant or prolonged (over 3 months) reactive arthritis triggered by an enteric or venereal infection, arthritis related to inflammatory bowel disease,
- Reactivation of arthritis, M02-M09, M45-46
- Suspicion of acute, rare systemic collagen disease, M30-M35 (SLE or systemic lupus erythematosus, polymyositis etc) or vasculitis, M30-M31
- Reactivation (relapse) of disease mentioned above in a patient known to have that disease, M30-M36: 1) impaired general condition and new target organ damage, 2) new clinical symptoms, radiological findings or abnormal laboratory finding that require evaluation by a specialist
- Difficult-to-treat gout, M10, despite therapy 1) continuous arthritis or 2) active disease implying need to evaluate differential diagnoses in relation to other rheumatic diseases
- Suspicion of rheumatic disease or complication or adverse event related to treatment of a rheumatic disease, E85, M80, Y57 (serious osteoporotic fracture, amyloidosis, adverse events related to pharmacotherapy etc.)
- Problematic joint disease of weight-bearing joint of lower extremity, M00-M25 (e.g., differential diagnosis of arthrosis and initiation of treatment)
- Abnormal finding in radiological or laboratory examinations in patients with only mild symptoms (R70, R89, R93), if these findings indicate a rheumatic disease, the treatment of which would benefit the patient.
- Evaluation of the need for rehabilitation or of the working ability of patients who must have a specialist physician's statement required by the competent authorities, M00-M99.

Current care guidelines (rheumatic arthritis)

www.kaypahoito.fi

See also

patients with a rheumatic disease

Working group:

Markku Korpela Pirkanmaa Hospital District, Heikki Julkunen Hospital District of Helsinki and Uusimaa/Peijas, Riitta Luosujärvi Kuopio University Hospital, Ritva Peltomaa Hospital District of Helsinki and Uusimaa, Marjatta Leirisalo-Repo Hospital District of Helsinki and Uusimaa, Pekka Hannonen Central Hospital of Central Finland, Anna Karjalainen Oulu University Hospital, Markku Hakala Rheumatism Foundation Hospital, Markku Kauppi Rheumatism Foundation Hospital, Timo Möttönen Turku University Central Hospital, Mikko Nenonen Rheumatism Foundation Hospital, Harri Blåfield South Ostrobothnia Central Hospital, Kirsti Ilva Kanta-Häme Central Hospital, Sven Kanckos Vaasa Central Hospital, Tapani Tuomiranta Open care unit of rheumatic diseases in Tampere, Kari Pietilä Pirkanmaa Hospital District

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PATIENT GROUPS THAT REQUIRE LONG-TERM FOLLOW-UP WITHIN SPECIALISED HEALTH CARE

ICD disease classification

M02-M14, M30-M36, M45-M46, M94

- Newly (within one year) diagnosed rheumatoid arthritis
- Patients on heavy combinations of antirheumatic drugs. Visits to a rheumatologist at 6 -12 months intervals.
- Patients with a rheumatic disease and receive biologicals (e.g., TNF-alpha blocking agents)
- Patients with an active rheumatic disease
- Severe systemic collagen diseases that require immunomodulatory therapy (e.g., SLE (systemic lupus erythematosus), Sjögren's syndrome, polymyositis) or vasculitis (e.g., Wegener's granulomatosis)
- Follow-up of pregnancy of patients with SLE, Sjögren's syndrome and the phospholipid syndrome*
- Amyloidosis related to rheumatoid arthritis or other inflammatory joint disease, or cervical damage that requires follow-up
- Rare inflammatory rheumatic diseases during active phases (e.g., Bechet's disease, polychondrosis etc.)
- If an inflammatory rheumatic disease is associated with serious complications of the internal organs (e.g., damage to pulmonary or renal function)

Current care guidelines (rheumatic arthritis)

www.kaypahoito.fi

Working group:

Markku Korpela Pirkanmaa Hospital District, Heikki Julkunen Hospital District of Helsinki and Uusimaa/Peijas, Riitta Luosujärvi Hospital District of Helsinki and Uusimaa, Ritva Peltomaa Hospital District of Helsinki and Uusimaa, Marjatta Leirisalo-Repo Hospital District of Helsinki and Uusimaa, Pekka Hannonen Central Hospital of Central Finland, Anna Karjalainen Oulu University Hospital, Markku Hakala Rheumatism Foundation Hospital, Markku Kauppi Rheumatism Foundation Hospital, Timo Möttönen Turku University Central Hospital, Mikko Nenonen Rheumatism Foundation Hospital, Harri Blåfield South Ostrobothnia Central Hospital, Kirsti Ilva Kanta-Häme Central Hospital, Sven Kanckos Vaasa Central Hospital, Tapani Tuomiranta Open care unit of rheumatic diseases in Tampere, Kari Pietilä Pirkanmaa Hospital District

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ENLARGED THYROID

ICD disease classification

E04, E05 Alia struma atoxica, hyperthyreosis

Classification of surgical procedures:

BAA Thyroid gland operation

Criteria for non-emergency surgical treatment within specialised health care

The criteria for consideration of surgery are appropriate diagnostics and adequate conservative treatment. A requirement for consideration of surgery is the identification, by sonography or some other form of medical imaging, of an enlarged thyroid gland that may cause compression of the patient's nerves, trachea or oesophagus.

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., that one may expect relief of compression symptoms of a grossly obese person by weight control), would not benefit from the operations.

- Symptoms of compression that impact on the patient's activities of daily living
- Recurrent goitre that causes symptoms of compression
- Recurrent, symptomatic thyroid cyst, despite conservative treatment
- Diseases that require surgery: Basedow's (Graves's) disease, hyperthyroidism, follicular adenoma or suspicion of follicular adenoma

Current care guidelines:

None

Working group:

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HAEMORRHOIDS

ICD disease classification

I84.9 Haemorrhoides ani non specificatae sine complicationibus
(Unspecified haemorrhoids without complications)

Primary health care

Requirements for haemorrhoids are appropriate diagnostics, differential diagnostics and sufficient conservative treatment with rubber band ligation

Information needed for non-emergency referral

The basis of consideration of surgical treatment of haemorrhoids is that the haemorrhoids are of grade IV or symptomatic haemorrhoids of grade II-III despite rubber band ligation treatment 3 – 4 times. Proctological state: findings at rectal palpation, proctoscopy and sigmoideoscopy/colonoscopy

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- **Score**
 - 0 points Grade I: Swollen perianal veins
 - 0 points Grade II: Haemorrhoids extrude when the patient strains, but retract into the anal canal in rest
 - 10 points Grade III: Haemorrhoids must be manually reduced after the patient has strained
 - 50 points Grade IV: Constantly extruded haemorrhoids
- **Symptoms**
 - 10 points Pain
 - 10 points Bleeding
 - 30 points Symptoms impact on the patient's activities of daily living at home or at work
 - 40 points Symptoms persist despite 3 – 4 treatments with rubber band ligation.
- **Complication despite treatment**
 - 50 points Posthaemorrhagic anaemia

Reference for scoring: None

Current care guidelines: None

Working group:

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OESOPHAGEAL REFLUX DISEASE

ICD disease classification

K21.0 Morbus refluxualis gastro-oesophageus
(reflux disease, flow of gastric contents into the oesophagus)

Classification of surgical procedures:

JBC Fundoplication (gastro-oesophageal antireflux operation)

Primary health care/Information needed for non-emergency referral

The basis for considering surgery is that differential diagnostics has been duly carried out and that conservative treatment for at least 6 months has not been satisfactory.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., gross obesity) would not benefit from the operation.

Despite effective medication of long duration the patient has unequivocal symptoms and findings compatible with the diagnosis, which include:

- Complications: 1) Symptoms related to regurgitation¹, the pharynx, the throat or the lungs, 2) erosive² oesophagitis, stricture that requires repeated dilatation or ulceration
- Symptoms and findings are kept at bay with chronic medication but the medications is unsuitable for the patient
- The benefit from surgery is considered to exceed the drawbacks after consideration of the patient's age, co-existing diseases and possible post-operative symptoms.

The criteria for non-emergency surgical treatment must be questioned especially if

- pharmacotherapy provides no benefit
- the manometry result is abnormal
- the pH-registration is normal
- the possible adverse effects of surgery will worsen the patient's symptoms

Current care guidelines: None

See also gastro-oesophageal reflux disease

Working group:

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¹ Backflow of stomach content into the oesophagus

² Causes small ulcers

INGUINAL, FEMORAL, UMBILICAL AND ABDOMINAL HERNIA

ICD disease classification

K40-43 Hernia inguinalis, femoralis, umbilicalis et abdominalis ventralis
(inguinal, femoral, umbilical and ventral hernia)

Classification of surgical procedures

JAB-JAG

Primary health care/Information needed for non-emergency referral

The basis of consideration of surgical treatment is a diagnosed hernia.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., gross obesity) would not benefit from the operation.

- Pain caused by the hernia
- Other impairment caused by the hernia on the activities of daily living
- High risk of strangulation
- Large hernia with risk of skin becoming compromised
- Suspicion of femoral hernia

Current care guidelines:

None

Working group:

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DIVERTICULOSIS

ICD disease classification

K57 Diverticulosis coli (diverticular disease of intestine)

Classification of surgical procedures:

JFB, JFH Resectio sigmae, hemicolectomy, colectomy

Primary health care/Information needed for non-emergency referral

The criteria for consideration of surgery are appropriate diagnostics and adequate conservative treatment

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., gross obesity) would not benefit from the operation.

Complication

Several episodes of diverticulitis have required hospital treatment

Diverticulitis complicated by colon perforation or phlegmone

Colon stricture, if cancer has been ruled out

- *Pain*
Chronic, persistent pain (despite conservative treatment) after an episode of diverticulitis
- *Other illness*
Patients on immunomodulatory therapy whose condition dictates a need of colon surgery after an episode of diverticulitis.

Current care guidelines:

None

Working group:

Ulla Keränen Hospital District of Helsinki and Uusimaa, Esko Kemppainen Hospital District of Helsinki and Uusimaa, Tom Scheinin Hospital District of Helsinki and Uusimaa, Caj Haglund Hospital District of Helsinki and Uusimaa, Kimmo Halonen Hospital District of Helsinki and Uusimaa, Vesa Perhoniemi Hospital District of Helsinki and Uusimaa

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ANAL FISSURE

ICD disease classification

K60 Fissura regionalis analis (Fissure and fistula of anal and rectal regions)

Classification of surgical procedures:

HD 10 Sphincterotomia lateralis

Primary health care/Information needed for non-emergency referral

The basis for considering surgery is that differential diagnostics has been duly carried out and that conservative treatment for at least 4 months has not been satisfactory. Proctological state: findings at rectal palpation, proctoscopy and sigmoideoscopy/colonoscopy

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Fissure-related pain
- Haemorrhage from fissure

Current care guidelines:

None

Working group:

Ulla Keränen Hospital District of Helsinki and Uusimaa, Kari Mikkola Hospital District of Helsinki and Uusimaa, Sini-Marja Sjöblom Hospital District of Helsinki and Uusimaa, Tuula Ranta-Knuuttila Hospital District of Helsinki and Uusimaa, Caj Haglund Hospital District of Helsinki and Uusimaa, Timo Pakkastie Hospital District of Helsinki and Uusimaa, Esko Kemppainen Hospital District of Helsinki and Uusimaa, Vesa Perhoniemi Hospital District of Helsinki and Uusimaa

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GALL STONES

ICD disease classification

K80 Cholelithiasis

Classification of surgical procedures:

JKA Cholecystectomy

Primary health care/Information needed for non-emergency referral

The basis for considering surgery is that the appropriate differential diagnostics has been done and that symptomatic gall stones are seen on sonography.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors (e.g., gross obesity) would not benefit from the operation.

- *Complications:*
 - 1) Porcelain gallbladder / suspicion of fistula, 2) history of cholecystitis, 3) history of pancreatitis, 4) transient deviation of liver function tests the other causes of which have been excluded, 5) patients on immunomodulatory treatment
- *Pain or inconvenience:*
 - 1) Gall stones seen sonographically and symptoms compatible with gall stone disease, 2) gall stone related symptoms hamper the patient's autonomy
- *Other illnesses may also require treating non-symptomatic gall stones:*
 - 1) Patients on immunomodulatory treatment, 2) diabetes requiring medication, 3) age of patient under 40 years (untreated gall stones increase the risk of cancer)

Current care guidelines:

None

Working group:

Ulla Keränen Hospital District of Helsinki and Uusimaa, Tom Scheinin Hospital District of Helsinki and Uusimaa, Kimmo Halonen Hospital District of Helsinki and Uusimaa, Tuula Ranta-Knuuttila Hospital District of Helsinki and Uusimaa, Caj Haglund Hospital District of Helsinki and Uusimaa, Vesa Perhoniemi Hospital District of Helsinki and Uusimaa

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THE CARPAL TUNNEL SYNDROME

ICD disease classification

G56.0 Syndroma canalis carpi (Carpal tunnel syndrome)

Primary health care/Information needed for non-emergency referral

- In mild cases nights splints should be tried for treatment.
- Before surgery is performed, contributing factors or diseases must be considered and treated (e.g., pregnancy, metabolic disorders and rheumatic arthritis)

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Functional disability*
 - 50 points Working inability
 - 30 points Daily disability
 - 20 points Limits daily living
 - 10 points Mild
 - 0 points No disability
- *Pain*
 - 30 points Continuous
 - 20 points Daily
 - 10 points Occasional
 - 0 points No pain
- *Complications*
 - 20 points Strong entrapment (by electroneuromyography)
 - 10 points Muscle atrophy
 - 10 points Impact on other diseases or treatments

Reference for scoring:

None

Current care guidelines:

None

Working group:

Timo Raatikainen Hospital District of Helsinki and Uusimaa

Contact person:

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(timo.raatikainen(at)hus.fi)

ARTHROSIS OF THE PROXIMAL PHALANX OF THE THUMB

ICD disease classification

M18.1 Arthrosis articulationis carpometacarpalis pollicis
(arthrosis of the proximal phalanx of the thumb)

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Functional disability*
 - 50 points Working inability
 - 30 points Daily disability
 - 20 points Limits daily living
 - 10 points Mild
 - 0 points No disability
- *Pain*
 - 30 points Continuous
 - 20 points Daily
 - 10 points Occasional
 - 0 points No pain
- *Complications*
 - 10 points Joint stiffness (contracture)
- *Impact on other diseases or treatments*
 - 10 points

Reference for scoring:

None

Current care guidelines:

None

Working group:

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Contact person:

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CARPAL GANGLION CYST

ICD disease classification

M67.4 Ganglion carpi (carpal ganglion cyst)

Primary health care/Information needed for non-emergency referral

Before surgery, puncture or compression of the ganglion needs to be considered or performed.

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Functional disability*
 - 50 points Working inability
 - 30 points Daily disability
 - 20 points Limits daily living
 - 10 points Mild
 - 0 points No disability
- *Pain*
 - 30 points Continuous
 - 20 points Daily
 - 10 points Occasional
 - 0 points No pain
- *Complications*
 - 20 points Nerve damage
 - 10 points Skin problem
 - 0 points No complications
- *Impact on other diseases or treatments*
 - 10 points

Reference for scoring:

None

Current care guidelines:

None

Working group:

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Contact person:

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DUPUYTREN'S CONTRACTURE (PALMAR FIBROMATOSIS)

ICD disease classification

M72.0 Fibromatosis aponeurosis palmaris (Dupuytren)
(Dupuytren's contracture)

Criteria for non-emergency surgical treatment within specialised health care (scoring 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Functional disability*
 - 50 points Working inability
 - 30 points Daily disability
 - 20 points Limits daily living
 - 10 points Mild
 - 0 points No disability
- *Limitation of movement*
 - 40 points Extension deficit of MP- or PIP-joint more than 45 °
 - 20 points Extension deficit in MP-joint + PIP-joint more than 30° or in MP-joint or PIP-joint more than 30 °
 - 10 points MP-joint more than 45°
- *Impact on other diseases or treatments*
 - 10 points

Reference for scoring:

None

Current care guidelines:

None

Working group:

Timo Raatikainen Hospital District of Helsinki and Uusimaa

Contact person:

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NON-EMERGENCY PAEDIATRIC SURGERY

A paediatric surgery patient usually either has or does not have an indication for treatment. It is also characteristic of this discipline that the patients may be divided into three categories as far as treatment urgency is concerned.

- The operation may be performed immediately after diagnosis (e.g., inguinal hernia)
- Surgery should be considered only after the child has reached a certain age, because the condition has a natural tendency to improve (e.g., hydrocele or accumulation of fluid around a testicle, which may be operated after the child, has reached 4 years of age.
- There is an optimum age for the operation, e.g., of boys with an undescended testicle

Current care guidelines:

None

Working group:

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Contact person:

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PATIENTS WITH A RHEUMATIC DISEASE

ICD disease classification

M05-M09, M13, M45 Inflammatory arthritis

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Pain*
 - 0 points Painless
 - 10 points Mild pain
 - 20 points Moderate
 - 30 points Severe
- *Other functional limitations* (eating, dressing or hygiene, hobbies)
 - 0 points No limitation
 - 5 points Mild limitation
 - 15 points Moderate limitation
 - 30 points Poses a threat to the management of everyday life
 - 40 points Working inability
- *Arthritis* (joint inflammation)
 - 0 points No inflammation
 - 20 points Moderate
 - 30 points Severe
- *Clinical findings* (joint deformity or instability)
 - 0 points No findings
 - 5 points Mild findings
 - 10 points Severe findings
- *Possibly progressive disease, as judged from radiographs*
 - 0 points No progression
 - 10 points Moderate
 - 20 points Significant
- General inflammatory activity of the disease
 - 0 points Mild
 - 10 points Significant
- *Treatment delays will cause permanent damage or significant impairment of treatment outcome* (e.g., tendon rupture, nerve entrapment)
 - 0 points None
 - 50 points Yes

Current care guidelines (rheumatic arthritis) www.kaypahoito.fi

Working group: Rheumatology: Pirjo Honkanen Pirkanmaa Hospital District,
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Contact person:

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ARTHROSIS OF HIP JOINT (COXARTHROSIS)

ICD disease classification

M16 Coxarthrosis

Primary health care/Information needed for non-emergency referral

The patient has clinically and radiologically unequivocal primary or secondary arthrosis of the hip joints.

Criteria for non-emergency surgical treatment within specialised health care (scoring 0-100)

The indication for surgery is always based on evaluations case by case. The patient must have had adequate and sufficient conservative treatment, pharmacotherapy and avoidance of unnecessary strain before evaluation. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- **Pain**
 - 0 points Painless
 - 10 points Mild pain, during strain
 - 20 points Moderate pain, analgesics often needed
 - 30 points Intense pain, pain at rest or pain during movements
- **Walking distance**
 - 0 points More than 1000 meters
 - 5 points 100-1000 meters
 - 10 points Less than 100 meters
- **Other functional impairment** (rising up, walking in stairs, putting on shoes, foot care, washing etc.)
 - 0 points No limitation
 - 5 points Mild limitation
 - 15 points Moderate limitation
 - 30 points Poses a threat to the management of everyday life
- **Clinical findings** (limitation of movement, difference in length of lower extremities, limping)
 - 0 points No findings
 - 5 points Mild findings
 - 10 points Severe finding
- **Possibly progressive disease, as judged from radiographs** (protrusion of the acetabulum, risk of fracture, bone defect, compression)
 - 0 points No threat
 - 10 points Moderate threat
 - 20 points Unequivocal risk

Current care guidelines: None

Working group:

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Contact person: Eero Hirvensalo (eero.hirvensalo(at)hus.fi)

ARTHROSIS OF KNEE (GONARTHROSIS)

ICD disease classification

M17 Gonarthrosis

Primary health care/Information needed for non-emergency referral

The patient has clinically and radiologically symptomatic primary or secondary arthrosis.

Criteria for non-emergency surgical treatment within specialised health care (scoring 0-100)

The indication for surgery is always based on evaluations case by case. The patient must have had adequate and sufficient conservative treatment, pharmacotherapy and avoidance of unnecessary strain before evaluation. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- **Pain**
 - 0 points Painless
 - 10 points Mild pain, during strain
 - 20 points Moderate pain, analgesics often needed
 - 30 points Intense pain, pain at rest or pain during movements
- **Walking distance**
 - 0 points More than 1000 meters
 - 5 points 100-1000 meters
 - 10 points Less than 100 meters
- **Other functional impairment** (rising up, walking in stairs, putting on shoes, foot care, washing, sex life, hobbies)
 - 0 points No limitation
 - 5 points Mild limitation
 - 15 points Moderate limitation
 - 30 points Poses a threat to the management of everyday life
- **Clinical findings** (limitation of movement, instability, deviation of mechanical axis, deformity)
 - 0 points No findings
 - 5 points Mild findings
 - 10 points Severe findings
- **Possibly progressive disease, as judged from radiographs** (risk of fracture, risk of rapidly progressive malposition)
 - 0 points No threat
 - 10 points Moderate threat
 - 20 points Unequivocal risk

Current care guidelines: None

Working group:

Eero Hirvensalo Hospital District of Helsinki and Uusimaa, Pekka Paavolainen Hospital District of Helsinki and Uusimaa, Jarmo Vuorinen Hospital District of Helsinki and Uusimaa

Contact person: Eero Hirvensalo (eero.hirvensalo(at)hus.fi)

HALLUX VALGUS (BUNION) AND HALLUX RIGIDUS

ICD disease classification

- M20.1 Hallux valgus
- M20.2 Hallux rigidus

Primary health care/Information needed for non-emergency referral

The patient has clinically obvious malposition of the big toe, enlargement of the medial part of the toe bone (bunion, exostosis) or arthrosis of the MTP-joint of the big toe and symptoms related to these findings.

Criteria for non-emergency surgical treatment within specialised health care (scoring 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- **Pain**
 - 0 points Painless
 - 10 points Mild, occasional pain
 - 20 points Moderate pain, daily
 - 30 points Severe pain, incessant
- **Functional limitations**
 - 0 points No limitations
 - 5 points Limitations of leisure-time activities
 - 10 points Limitations of activities of daily living
 - 30 points Limitations of all activities
- **Shoes**
 - 0 points Ordinary shoes, no supports or insoles
 - 5 points Soft or special shoes, shoe supports or insoles needed
- **Mobility of MTP joint of big toe**
(plantar flexion and ventral extension combined)
 - 0 points Normal or only mild limitation (more than 45 degrees)
 - 10 points Unequivocal limitation (movement less than 45 degrees)
- **MCP-joint of big toe affected by extraneous fibrous tissue (callus) or bunion**
 - 0 points No callus or bunion (skin normal)
 - 10 points Disturbing callus or bunion (skin clearly chronically irritated))
- **Axes of big toe**
 - 0 points No arthrosis, normal angle (less than 15 degrees)
 - 10 points Mild arthrosis, moderate malalignment (15-25 degrees)
 - 15 points Advances arthrosis, marked malalignment (more than 25 degrees)
 - 0 points No limitation

Current care guidelines: None

Working group: Eero Hirvensalo Hospital District of Helsinki and Uusimaa, Pekka Paavolainen Hospital District of Helsinki and Uusimaa, Jarmo Vuorinen Hospital District of Helsinki and Uusimaa

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DEGENERATED ROTATOR CUFF

ICD disease classification

- M75.1 Syndroma musculi supraspinati
 (rotator cuff syndrome)
- M75.4 Syndroma angustiarum subacromiale
 (subacromial impingement syndrome)
- S46.0 Laesio tendinis armillae tendinum musculorum rotatorum
 (injury of muscle and tendon at shoulder and upper arm level)
 NB: This evaluation does not include wide injuries to the tendons
 and articular capsule caused by high-energetic injury.

Requirements for assessment of surgical treatment are: clinical examination, flat radiography and sonography or MRI. The finding must be a damaged rotator cuff or mechanical impingement within the rotator cuff. Conservative treatment (non-surgical treatment) has not resulted in symptom alleviation within 2 – 6 months

Criteria for non-emergency surgical treatment within specialised health care (scoring 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors, e.g., if the function of the rotator cuff is beyond repair in cases where the shoulder joint has become atrophic after an injury that took place several years previously.

- *Pain*
 - 0 points No pain
 - 10 points Mild
 - 20 points Moderate
 - 30 points Severe, nocturnal
- *Daily use of upper extremity*
 - 10 points Causes discomfort during physical exertion
 - 20 points Causes discomfort at work and during daily living
 - 30 points Use only as assisting extremity
- *Movement with no resistance* (elevation and abduction combined)
 - 0 points more than 150 degrees
 - 5 points 90-150 degrees
 - 10 points 60-90 degrees
 - 20 points less than 60 degrees
- *External or internal rotation against resistance*
 - 0 points Strength symmetrical with the contralateral side
 - 5 points Rotation against resistance impaired in comparison with contralateral side
 - 15 points Rotation against resistance not possible

- *Abduction against resistance*

- 0 points Abduction to 90 degrees strong and symmetrical in comparison to contralateral side
- 5 points Abduction to 90 degrees impaired in comparison to contralateral side

Current care guidelines:

None

Working group:

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NON-EMERGENCY ARTHROSCOPY OF KNEE JOINT

ICD disease classification

M23 For example: Vitium menisci e laceratione (derangement of meniscus due to old tear or injury), Corpus liberum genus (loose body in knee)

On the basis of a thorough clinical examination it is likely that the patient has an intraarticular injury or illness which has not improved after conservative treatment for 1 – 6 months. It is also assumed that arthroscopy will probably benefit the patient (therapeutic arthroscopy).

Clinically and radiologically significant arthrosis, arthritis of unknown aetiology, joint instability and other extraarticular injuries or diseases are not included in this assessment. The radiological assessment is preferably made on radiographs taken with the patient standing.

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Limping or subluxation of the joint*
 - 0 points None
 - 30 points Occasional
 - 40 points Frequent subluxation or unequivocal limping
- *Pain*
 - 0 points None
 - 20 points During strain or after walking 1 km
 - 30 points After walking less than 1 km or at rest
- *Swelling*
 - 0 points None
 - 5 points During strain
 - 10 points Continuous
- *Clinical findings*
 - 0 points Pain cannot be provoked during the examination
 - 10 points Intraarticular, pain difficult to localise
 - 20 points Typical finding (e.g., pain elicited in meniscus or finding of mechanical disturbance)

Current care guidelines: None

Working group:

Orthopaedics: Eero Hirvensalo Hospital District of Helsinki and Uusimaa, Pekka Paavolainen Hospital District of Helsinki and Uusimaa, Jarmo Vuorinen Hospital District of Helsinki and Uusimaa

Neurosurgery: Simo Valtonen Turku University Central Hospital, Hanna Järvinen Social Insurance Institution of Finland, Esa Kotilainen Turku University Central Hospital, Kristiina Matintalo-Mäki Turku University Central Hospital, Jaakko Rinne Kuopio University Hospital, Anne Santalahti City of Turku, Matti Seppälä Helsinki University Central Hospital, Turkka Tunturi Turku University Central Hospital

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STENOSIS OF THE LUMBAR SPINE

ICD disease classification

M48.0 Stenosis canalis spinalis lumbalis (stenosis of the lumbar spine)

Primary health care/Information needed for non-emergency referral

The patient has symptomatic stenosis of the lumbar spine. The criteria for non-emergency surgery are severe pain in the lower back and gluteal area and claudication. Conservative treatment for 6 months has not benefited the patient.

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- **Walking distance**

0 points	No limitation
10 points	1-2 km
30 points	100 – 1000 m
40 points	Less than 100 meters
- **Pain**

0 points	No pain
10 points	Mild calf pain
20 points	Moderate pain at rest
30 points	Severe pain at rest
- **Functional limitation** (outside help, walking is stairs, standing up, walking indoors, necessary outdoor tasks, personal hygiene, dressing)

0 points	No limitations
5 points	Mild limitation
10 points	Moderate limitation
30 points	Poses a threat to the management of everyday life

Reference for scoring

For measuring the symptoms of the patient, Oswestry's modified scoring form may be used (functional deficit expressed as a percentage) (Fairbank JCT et al. 1980).

Current care guidelines (adult lower back disorders)

www.kaypahoito.fi

Working group:

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SPINAL DISC HERNIATION

ICD disease classification

M51.1 Ischias ex morbositate disci intervertebralis
(Lumbar and other intervertebral disc disorders with radiculopathy)

Primary health care/Information needed for non-emergency referral

The patient should have clinically evident sciatica. The radiological findings must be in concordance with the clinical picture. The finding should include spinal disc herniation that impinges on adjacent nerves; the symptoms and findings should be in concordance with the compressed nerves.

The initial treatment of spinal disc herniation is conservative. Analgesics and other treatment of the pain should be recommended as dictated by the patient's pain symptom for the first 2 months. If the clinical situation deteriorates during follow-up or if there is no alleviation of the patient's symptoms after 2 months, surgery is considered.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors. The operation should be made within one month after the decision to operate has been taken, since the benefit from surgery declines if severe symptoms are allowed to continue.

Current care guidelines (adult lower back disorders)

www.kaypahoito.fi

Working group:

Orthopaedics:

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Neurosurgery:

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LUMBAR SPINE INSTABILITY

ICD disease classification

M53.2 Instabilitates dorsi

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency treatment includes

- discomfort that has not abated despite conservative treatment which prohibits normal life

Current care guidelines (adult lower back disorders)

www.kaypahoito.fi

Working group:

Neurosurgery:

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Orthopaedics:

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REDUCTION MAMMOPLASTY

ICD disease classification

N62 Hypertrophy of breast

Classification of surgical procedures

HAD30, HAD35

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Breast size: distance between jugulum and mamilla*

40 points	Less than 27 cm
50 points	27-31 cm
60 points	More than 31 cm
- *Symptoms from shoulders and neck*

0-20 points	When the patient's body weight index* is less than 30
0-10 points	When the patient's body weight index is 30 - 35
0 points	When the patient's body weight index more than 35
- *Functional limitation*

0-20 points	When the patient's body weight index is less than 30
0-10 points	When the patient's body weight index is 30 - 35
0 points	When the patient's body weight index more than 35

Reference for scoring:

None

Current care guidelines:

None

Working group:

Erkki Tukiainen Hospital District of Helsinki and Uusimaa

Contact person:

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* Weight (kg) divided by length (metres) squared (kg/m²)

RECONSTRUCTION OF BREAST

ICD disease classification

Z90.1 Absence of breast

Classification of surgical procedures

HAE 05 Reconstruction of breast using soft tissue and prosthesis,

HAE 10 Reconstruction of breast using graft or flap

Criteria for non-emergency surgical treatment within specialised health care (score 0-100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors (e.g., contraindication related to cancer treatment, suitability of surgical procedure to the individual patient, and the patient's degree of motivation).

- *Difference in the size of the breast because of absence or malformation of breast*
0-50 points
- *Functional discomfort* (e.g., cannot use external prosthesis)
0-20 points
- *Psychosocial disability*
0-20 points

Reference for scoring:

None

Current care guidelines:

None

Working group:

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THORACIC OUTLET SYNDROME

ICD disease classification

G54.0 Morbositates plexus brachialis (thoracic outlet syndrome, TOS))

Criteria for non-emergency surgical treatment within specialised health care (0-100 points)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Blood vessel or nerve complication*
- *Pain*
 - 20 points Daily pain in arm when strained
 - 30 points Pain prohibits working especially when arm is elevated
 - 80 points Pain at rest
- *Disability*
 - 40 points Working inability
 - 30 points Affects working capacity negatively
 - 10 points Affects leisure-time activities negatively

Reference for scoring:

None

Current care guidelines:

None

Working group:

Jorma Sipponen Hospital District of Helsinki and Uusimaa, Jarmo Salo Hospital District of Helsinki and Uusimaa, Henrik Sell Hospital District of Helsinki and Uusimaa, Ilkka Mäenpää Hospital District of Helsinki and Uusimaa, Juha Pitkänen Hospital District of Helsinki and Uusimaa

Contact person:

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CORONARY ARTERY DISEASE

ICD disease classification

I20 Angina pectoris (coronary artery disease)

Criteria for non-emergency surgical treatment within specialised health care

The need for treatment is evaluated by cardiologists. Generally, the primary consideration regarding coronary heart disease is to evaluate the possibility to perform percutaneous transluminal coronary angioplasty or coronary artery bypass grafting. Surgery may be indicated if the situation is problematic or if the patient does not gain benefit or the benefit is insufficient.

Basis for evaluation of non-emergency surgery

- Pain or inconvenience: NYHA I-II (-III)*
- Only partial ischemia
- Findings at angiography indicate surgery. The findings have prognostic significance.
- Retained left ventricular function (EF more than 0.50)
- No symptoms or signs of heart failure. No complications, concomitant heart surgery or cardiac condition (infarction, heart failure, arrhythmias)

General basis for evaluation of cardiac surgery

- Need for hospital care
- Quality of life
- Working ability
- Risk at anaesthesia
- Surgical risk (Euroscore risk assessment, logistical risk of death)
- Concomitant diseases
- Patient's own desire

Current care guidelines:

None

See also

Recommendations for CABG and heart valve surgery: www.hus.fi

Working group:

Jorma Sipponen Hospital District of Helsinki and Uusimaa, Markku Kupari Hospital District of Helsinki and Uusimaa

Contact person:

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* New York Heart Association

VALVULAR DISEASE

ICD disease classification

I34-37 Vitia valvae mitralis, aortae, tricuspidalis et pulmonalis non rheumaticae (non-rheumatic disease of the mitral, aortic, tricuspid or pulmonary valve)

Criteria for non-emergency surgical treatment within specialised health care

Valve stenosis and valve insufficiency are evaluated on partially different bases for the various types of heart valves.

Common bases for evaluation of valve surgery are:

- Pain or inconvenience:
Non-symptomatic or minor symptoms (NYHA I-II) ¹
- Left ventricle function is retained
Contractility (ejection fraction = EF more than 0.50, in mitral insufficiency more than 0.60)
No significant ventricular dilatation, EDD (End Diastolic Diameter) less than 75 mm
- Pulmonary artery pressure: Systolic PA less than 50 mmHg
- No symptoms or signs of heart failure
- No complications or coexisting cardiac diseases or operations (infarction, other valves, arrhythmias)

Consider also the general basis for evaluation of cardiac surgery:

- Need for hospital care
- Quality of life
- Working ability
- Risk at anaesthesia
- Surgical risk (Euroscore risk assessment, logistical risk of death)
- Concomitant diseases
- Patient's own desire

Current care guidelines:

None

See also

Recommendations for CABG and heart valve surgery: www.Hus.fi (cardiology): valvular disease or suspicion of valvular disease

Working group:

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¹ New York Heart Association

BENIGN PROSTATIC HYPERPLASIA

ICD disease classification

N40 Hyperplasia prostatae (prostatic hyperplasia)

Classification of surgical procedures

KED 22 Transurethral resection of prostate

KED 33 Transurethral incision of prostate

KED 76 Electrovaporisation of the prostate

Primary health care/Information needed for non-emergency referral

Appropriate diagnostics and pharmacotherapy for at least 6 months. Symptom score more than 18 despite ongoing pharmacotherapy.

Criteria for non-emergency surgical treatment within specialised health care (0-100 points)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Degree of obstruction of lower urinary tract and symptoms*
 - 50 points Frequent recurrence of chronic urinary tract infection
 - 50 points Urinary calculus
 - 50 points Recurrent haematuria because of prostatic hyperplasia
 - 50 points Residual urine volume more than 300 ml
 - 15 points Residual urine volume 100 – 299 ml
 - 0 points Residual urine volume 50 – 99 ml
- *Micturition (passing of urine)*
 - 25 points Urinary flow less than 5 ml/s
 - 20 points Urinary flow less than 12 ml/s
 - 20 points Urinary flow more than 12 ml/s and pressure-flow examination indicates obstruction of the lower urinary tract
- *Symptoms (DANPSS)*
 - 15 points Symptom x discomfort score more than 18
 - 10 points Symptom x discomfort score 8 – 18
 - 0 points Symptom x discomfort score 0 – 7
- *Hyperplasia of middle lobe*
 - 15 points
- *Intermittent haematuria that does not require hospital treatment*
 - 15 points
- *Recurrent urinary tract infection*
 - 15 points
- *Profuse diverticulosis of urinary bladder*
 - 25 points

- *Poor effect from pharmacotherapy*
25 points
- Other circumstances
10 points Cost of drugs
10 points Prostate weight more than 40 grams

Reference for scoring:

None

Current care guidelines (benign prostatic hyperplasia)

www.kaypahoito.fi

Working group:

Martti Ala-Opas Hospital District of Helsinki and Uusimaa, Gunnar Frölander-Ulf Hospital District of Helsinki and Uusimaa, Harri Juusela Hospital District of Helsinki and Uusimaa, Eero Kaasinen Hospital District of Helsinki and Uusimaa, Kari Lampisjärvi Hospital District of Helsinki and Uusimaa, Risto Salminen Hospital District of Helsinki and Uusimaa

Contact person:

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SURGICAL TREATMENT OF HYDROCELE

ICD disease classification

- N43 Hydrocele
- N 43.4 Spermatocoele

Classification of surgical procedures

- KFD20 Excision of hydrocele
- KFD30 Surgery for spermatocoele
- KF8T Puncture sclerotherapy

Criteria for non-emergency surgical treatment within specialised health care (0-100 points)

Puncture of the fluid and sclerotherapy may be used first. If this is not possible or feasible or if sclerotherapy* fails, surgery is considered.

The indication for surgery is always based on evaluations case by case. In addition to poor response to sclerotherapy, the threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Disability*
 - 30 points Space-occupying disability
 - 20 points Difficulty to urinate
 - 10 points Difficulty to have sexual intercourse
- *Size*
 - 30 points More than 10 cm
 - 20 points Size 3 - 10 cm
 - 0 points Less than 3 cm
- *Pain*
 - 30 points Continuous pain
 - 20 points Pain when moving
 - 0 points Pain in certain circumstances

Reference for scoring:

None

Current care guidelines:

None

Working group:

Martti Ala-Opas Hospital District of Helsinki and Uusimaa, Gunnar Frölander-Ulf Hospital District of Helsinki and Uusimaa, Harri Juusela Hospital District of Helsinki and Uusimaa, Eero Kaasinen Hospital District of Helsinki and Uusimaa, Kari Lampisjärvi Hospital District of Helsinki and Uusimaa, Risto Salminen Hospital District of Helsinki and Uusimaa

Contact person: Martti Ala-Opas (martti.ala-opas(at)hus.fi)

* Liquid extracted by puncture and sclerosing substance injected instead.

CAROTID ARTERY STENOSIS

ICD disease classification

- I65.2 Stenosis arteriae carotidis sine infarctu
(carotid artery stenosis without infarction)
- I63.1 Stenosis arteriae carotidis cum infarctu
(carotid artery stenosis with infarction)

Primary health care/Information needed for non-emergency referral

A symptom-free, incidental finding of severe carotid stenosis requires primarily neurological evaluation of the patient.

If there is a suspicion that a significant carotid stenosis is the source of symptomatic embolism, the patient requires urgent neurological evaluation.

Criteria for non-emergency surgical treatment within specialised health care (score 0 – 100)

The indication for surgery is always based on evaluations case by case. It is the responsibility of a neurologist to assess which patients need to be further evaluated by a vascular surgeon with regard to the need for surgery. The decision to operate is made by a vascular surgeon and a neurologist together.

The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *The patient is symptom-free but has severe (70 – 99%) carotid stenosis*
40 points
- *Age*
10 points Less than 75 years

Reference for scoring:

None

Current care guidelines (cerebral infarction (stroke))

www.kaypahoito.fi

Working group:

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INTERMITTENT CLAUDICATION

ICD disease classification

I70.2 Atherosclerosis arteriarum membrorum
(atherosclerosis of arteries of extremities)

Primary health care/Information needed for non-emergency referral

The claudication has either been established by objective means as being due to atherosclerosis or there is a well-founded reason to suspect this.

Criteria for non-emergency invasive diagnostic procedures, endovascular treatment and surgical treatment within specialised health care (score 0 – 100)

The ratio of the systolic blood pressure between the ankle and the upper arm measured with a Doppler device or similar less than 0.9, or poor result in volume plethysmography, or reduction of more than 30 % of the systolic ankle blood pressure during treadmill testing.

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Clinical disability (only one alternative)*
 - 0 points Symptom-free or no disability
 - 20 points Claudication limits leisure time activities (hobbies)
 - 30 points Symptoms limit daily professional activities and activities of daily living
 - 50 points Symptoms impede on the patients' capacity to care for himself or Patient is work disabled or cannot perform the activities of daily living
- *Factors impacting the final outcome of treatment (each item is assessed separately)*
 - 10 points Walking exercises and pharmacotherapy have been of no benefit
 - 10 points Symptoms have not decreased during the last 6 months
 - 10 points The patient has not smoked for 3 months (continued smoking puts treatment results at risk)
- *It is possible by surgery or an intravascular procedure to reinstitute the patient's working ability or functions of daily living and/or to eliminate the claudication*
 - 0 points Unlikely (distal arteries affected, concomitant illnesses, poor treatment compliance)
 - 10 points Maybe
 - 20 points Probably (aortoiliacal artery disease, no other limiting disease, good treatment compliance)

Reference for scoring:

Further development and validation of criteria for referral of patients with claudication Sinikka Marin, Pekka Aho, Mauri Lepäntalo. <http://www.laakarilehti.fi/sisallys/index.html?nr=39,yr=2007> (in Finnish)

Current care guidelines (Peripheral arterial disease)

www.kaypahoito.fi

Working group:

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ANEURYSM OF THE ABDOMINAL AORTA

ICD disease classification

I71.4 Aneurysma aortae abdominalis (aneurysm of the abdominal aorta)

Primary health care/Information needed for non-emergency referral

The patient has a symptom-free aneurysm of the abdominal aorta that has been confirmed by sonography to have a maximal diameter of at least 45 mm.

Criteria for non-emergency surgical treatment within specialised health care

Since surgical repair is associated with a certain mortality risk, surgery is indicated only if the risk is significantly smaller than the risk associated with the natural prognosis of the condition.

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- *Maximum diameter of aneurysm:* Males at least 55 mm males and females 50 mm. Urgent treatment is needed if the size of the aneurysm exceeds 65 mm.
- *Significant increase in diameter during follow-up:* 10 mm or more within 1 year. An increase of 10 mm by sonography corresponds to an increase of at least 5 mm in reality considering the limits of precision of the sonographic methods.

Current care guidelines:

None

Working group:

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INTERMITTENT CLAUDICATION

ICD disease classification

- I87.2 Venous insufficiency (chronic)(peripheral)
- I83.2 Varicose veins of lower extremities with both ulcer and inflammation
- I83.9 Varicose veins of lower extremities without ulcer or inflammation

Primary health care/Information needed for non-emergency referral

- Severe venous insufficiency (C4 – 6) or lower extremity oedema due to venous insufficiency that does not respond to treatment with compression stockings, or problems with varicose veins
- The referral must contain a clear description of the patient's symptom, findings and degree of disability (disability class).

Criteria for non-emergency surgical treatment within specialised health care (score 0 – 100)

The patient has reflux in a treatable vein that has been verified by clinical symptoms and findings and by examination with a Doppler or duplex device. Treatable vein means a vessel that exhibits reflux over a large area of the lower extremity.

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Degree of severity C4 – 6 [skin changes related to venous insufficiency, e.g., pigmentation or eczema (C4), skin changes and cured leg ulcer (C5), skin changes and leg ulcer (C6)], vbleeding varicosity or wide thrombophlebitis*
50 points
- *Degree of severity C 2-3: Varicosities (C2), oedema without skin changes (C3)*
 - 0 points Symptomfree
 - 35 points Has symptoms, but the patient's ability to work or to function in daily life is not threatened
 - 40 points Has symptoms, working ability or ability to function in daily life can only be maintained with the use of a medical compression stocking
 - 50 points Has symptoms, working ability or ability to function in daily life cannot maintained even with the with the use of a medical compression stocking
- *Pain*
 - 0 points No pain
 - 2 points Occasional, no need for analgesics
 - 4 points Daily
 - 6 points Continuousa

▪ *Varicose veins*

- 0 points No varicosities
- 2 points One varicosity
- 4 points Several varicosities in the area either of the calf or of the thigh
- 6 points Vast areas of varicose veins in the area of the calf and of the thigh

▪ *Swelling*

- 0 points No swelling
- 2 points Ankle swelling in the evenings
- 4 points Swelling above the ankle also in the afternoons
- 6 points Swelling above the ankle from the morning

▪ *Treatment with stocking*

- 0 points Not used
- 2 points Occasionally used
- 4 points Used most of the time
- 6 points Used continuously or patient cannot use stockings

Reference for scoring:

None

Current care guidelines (lower extremity venous insufficiency)

www.kaypahoito.fi

Working group:

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MASTITIS

ICD disease classification

N61 Mastitis

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Secreting cavity (sinus)
- Hardening (induration) after acute infection
- Recurrent acute infection

Current care guidelines:

None

Working group:

Karl von Smitten Hospital District of Helsinki and Uusimaa

Contact person:

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GYNAECOMASTIA

ICD disease classification

N62 Gynaecomastia

Criteria for non-emergency surgical treatment within specialised health care (score 0 – 100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Social disability*
 - 30 points Does not dare to expose the upper part of the body
 - 20 points Must choose his clothing
 - 20 points Cannot pursue all leisure-time activities he would like to
- *Pain*
 - 20 points Must adapt clothing because of sensitivity of the nipple to touch
 - 50 points Sensitivity or pain to touch are a daily bother and cause significant disturbance to the patient's daily life

Reference for scoring:

None

Current care guidelines:

None

Working group:

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Contact person:

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BRAIN CANCER (GLIOMA)

ICD disease classification

C71 Neoplasma malignum cerebri (glioma)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment, a symptomatic tumour or tumour of unknown type require urgent treatment.

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- low grade incidentaloma.

High-grade gliomas of the basal ganglia, multiple tumours and recurrent (less than 6 months) high-grade glioma are not suitable for surgical treatment.

Current care guidelines:

None

Working group:

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SPINAL TUMOURS

ICD disease classification

C72.0 Neoplasma malignum medullae spinalis (malignant spinal tumour)

D33.4 Neoplasma benignum medullae spinalis (benign spinal tumour)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment, a symptomatic tumour in the area of the cervical or thoracic spine requires urgent treatment.

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- symptomatic tumour in the lumbar area

Malignant extradural tumours that have caused complete bilateral paralysis of the lower extremities and symptom-free incidental tumours are not suitable for surgical treatment.

Current care guidelines:

None

Working group:

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SECONDARY MALIGNANT NEOPLASMS OF OTHER SITES

ICD disease classification

C79 Neoplasma malignum secundarium aliis locis
(secondary malignant neoplasm of other sites)

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

All patients that have symptoms require emergency treatment, with the exception of patients with multiple metastases which are not suitable for surgical treatment.

Current care guidelines:

None

Working group:

Esa Kotilainen Turku University Central Hospital, Hanna Järvinen Social Insurance Institution of Finland, Kristiina Matintalo-Mäki Turku University Central Hospital, Jaakko Rinne Kuopio University Hospital, Anne Santalahti City of Turku, Matti Seppälä Helsinki University Central Hospital, Turkka Tunturi Turku University Central Hospital

Contact person:

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TUMOURS OF THE MENINGES OF THE CENTRAL NERVOUS SYSTEM (MENINGEOMAS)

ICD disease classification

D32 Neoplasma benignum meningum
(Benign neoplasm of meninges)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment, a symptomatic tumour requires urgent treatment.

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- incidentaloma with a diameter of more than 3 cm.
- small incidentaloma, the removal of which is indicated for special reasons.
- incidentaloma which increases in size during follow-up.
- recurrent meningioma which increases in size during follow-up.

Small incidentalomas are generally not suitable for surgical treatment.

Current care guidelines:

None

Working group:

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Contact person:

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BENIGN CRANIAL NERVE TUMOUR (ACOUSTICUS NEURINOMA)

ICD disease classification

D33.3 Neoplasma benignum nervi cranialis (acousticus neurinoma)

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- As a general rule, symptomatic tumours. If the tumour causes symptoms of brain stem compression, it must be treated urgently.
- small incidentaloma, the removal of which is indicated for special reasons

Small incidentalomas are generally not suitable for surgical treatment.

Current care guidelines:

None

Working group:

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BENIGN HYPOPHYSEAL TUMOUR

ICD disease classification

D35.2 Neoplasma benignum hypophysis
(Pituitary gland benign neoplasm)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment, a tumour that causes visual symptoms usually requires urgent treatment, as do acromegaly and Cushing's disease.

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- prolactin-secreting hypophyseal tumour (prolactinoma) that is unresponsive to pharmacotherapy
- suprasellar incidentaloma
- Infraselar incidentaloma that has increased in size during follow-up

Intrasellar incidentalomas are generally not suitable for surgical treatment.

Current care guidelines:

None

Working group:

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SPASTICITY, MOVEMENT DISORDERS AND CHRONIC PAIN

ICD disease classification

- G20 Morbus Parkinson (Parkinson's disease)
- G24 Muscular dystonia
- G25 Aliae perturbationes extrapyramidales et motoricae
(other extrapyramidal disturbances and movement disorders)

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency treatment includes

- all neurosurgical operations related to these diseases

Current care guidelines:

None

Working group:

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EPILEPSY

ICD disease classification

G40 Epilepsia

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency treatment includes

- epilepsy and a multiprofessional working group has decided that surgery is an appropriate treatment

Current care guidelines:

None

Working group:

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TRIGEMINUS NEURALGIA

ICD disease classification

G50.0 Neuralgia trigeminalis (trigeminus neuralgia)

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- Pain that disturbs the patient's speaking and eating requires urgent treatment.

Non-emergency treatment includesu

- disturbing pain despite pharmacotherapy..

Current care guideliness:

None

Working group:

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HYDROCEPHALUS

ICD disease classification

G91.2 Hydrocephalia normotensiva (Normal-pressure hydrocephalus)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment, hydrocephalus that causes symptoms requires urgent treatment.

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- patients with hydrocephalus and no pressure-related symptoms

Current care guidelines:

None

Working group:

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ARACHNOID CYST

ICD disease classification

G93.0 Cysta arachnoidealis (arachnoid cyst)

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- space occupying cyst, as judged radiologically

Cysts that radiologically do not occupy space are not treated surgically.

Current care guidelines:

None

Working group:

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UNRUPTURED INTRACEREBRAL ANEURYSM

ICD disease classification

I67.1 Aneurysma encephali non ruptum
(unruptured intracerebral aneurysm)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment, an aneurysm that causes cranial nerve palsy, some other neurological defect symptom or epilepsy requires urgent treatment.-

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical or endovascular treatment includes

- incidental aneurysm sized more than 2 mm and the patient's age is less than 75 years

Incidental aneurysms sized less than 2 mm or patients above the age of 75 years are not suitable for surgical treatment.

Current care guidelines:

None

Working group:

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INTRACRANIAL ARTERIO-VEINUS MALFORMATIONS AND CAVERNOSUS HAEMANGIOMAS

ICD disease classification

- Q28.0 Malformatio arteriovenosa vasorum praecerebralis
(Arteriovenous malformation of precerebral vessels)
- Q28.2 Malformatio arteriovenosa cerebri
(Arteriovenous malformation of cerebral vessels)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment, a history of a haemorrhagic arterio-venous malformation or cavernous haemangioma requires urgent treatment.

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- incidental arteriovenous epileptogenic malformation
- epileptogenic cavernous haemangioma
- incidental cavernous haemangioma under special circumstances

As a general rule, incidental cavernous haemangiomas are not treated surgically.

Current care guidelines:

None

Working group:

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CERVICAL DISC DISORDER WITH RADICULOPATHY

ICD disease classification

M50.1 Morbositates disci intervertebralis cervicalis cum radiculopathia
(cervical disc disorder with radiculopathy)

Criteria for non-emergency surgical treatment within specialised health care

When considering the need for non-emergency treatment any symptoms requiring urgent treatment must be considered: Radicular paresis, symptom of spinal cord compression and radicular pain not manageable with pharmacotherapy.

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- radicular pain that despite conservative treatment has persisted for longer than 2 months

Current care guidelines:

None

Working group:

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BONE DEFECTS OF THE CRANIUM

ICD disease classification

T90.5 Sequelae of intracranial injury

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency surgical treatment includes

- Repair of cranial bone defect due to injury, surgery or infection

Current care guidelines:

None

Working group:

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STENOSIS OF THE LUMBAR SPINE

ICD disease classification

M48.0 Stenosis canalis spinalis lumbalis (stenosis of the lumbar spine)

Primary health care/Information needed for non-emergency referral

The patient has symptomatic stenosis of the lumbar spine. The criteria for non-emergency surgery are severe pain in the lower back and gluteal area and claudication. Conservative treatment for 6 months has not benefited the patient.

Criteria for non-emergency surgical treatment within specialised health care (score 0 – 100)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- **Walking distance**

0 points	No limitation
10 points	1-2 km
30 points	100 – 1000 m
40 points	Less than 100 meters
- **Pain**

0 points	No pain
10 points	Mild calf pain
20 points	Moderate pain at rest
30 points	Severe pain at rest
- **Functional limitation** (outside help, walking is stairs, standing up, walking indoors, necessary outdoor tasks, personal hygiene, dressing)

0 points	No limitations
5 points	Mild limitation
10 points	Moderate limitation
30 points	Poses a threat to the management of everyday life

Reference for scoring

For measuring the symptoms of the patient, Oswestry's modified scoring form may be used (functional deficit expressed as a percentage) (Fairbank JCT et al. 1980).

Current care guidelines (adult lower back disorders) www.kaypahoito.fi

Working group:

Orthopaedics: Eero Hirvensalo Hospital District of Helsinki and Uusimaa, Pekka Paavolainen Hospital District of Helsinki and Uusimaa, Jarmo Vuorinen Hospital District of Helsinki and Uusimaa, Jyrki Kankare Hospital District of Helsinki and Uusimaa

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Contact person: Eero Hirvensalo ([eero.hirvensalo\(at\)hus.fi](mailto:eero.hirvensalo(at)hus.fi))

SPINAL DISC HERNIATION

ICD disease classification

M51.1 Ischias ex morbositate disci intervertebralis
(lumbar and other intervertebral disc disorders with radiculopathy)

Primary health care/Information needed for non-emergency referral

The patient should have clinically evident sciatica. The radiological findings must be in concordance with the clinical picture. The finding should include spinal disc herniation that impinges on adjacent nerves; the symptoms and findings should be in concordance with the compressed nerves.

The initial treatment of spinal disc herniation is conservative. Analgesics and other treatment of the pain should be recommended as dictated by the patient's pain symptom for the first 2 months. If the clinical situation deteriorates during follow-up or if there is no alleviation of the patient's symptoms after 2 months, surgery is considered.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors. The operation should be made within one month after the decision to operate has been taken, since the benefit from surgery declines if severe symptoms are allowed to continue.

Current care guidelines (adult lower back disorders)

www.kaypahoito.fi

Working group:

Neurosurgery:

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LUMBAR SPINE INSTABILITY

ICD disease classification

M53.2 Instabilitates dorsi (Spinal instabilities)

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. Surgery is not performed, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Non-emergency treatment includes

- discomfort that has not abated despite conservative treatment which prohibits normal life

Current care guidelines (adult lower back disorders)

www.kaypahoito.fi

Working group:

Neurosurgery:

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HYSTERECTOMY

ICD disease classification

- D25 Myoma uteri (Leiomyoma of uterus)
- N80 Endometriosis
- N92.0 Menstruatio abundans et frequens cum cyclo regulari
(Excessive and frequent menstruation with regular cycle)

Criteria for non-emergency surgical treatment within specialised health care (0-100 points)

The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

Benign smooth muscle tumour of the uterus (myoma)

- *Size of myoma*
 - 50 points Intramural size of the tumour (size inside uterus wall) more than 10 cm or the greatest diameter of the uterus more than 20 cm
 - 30 points Submucous myoma identified by hysteroscopy (inspection of the uterus with ann. instrument) or sonohysterography (ultrasound examination of the uterine cavity)
- *Disability*
 - 30 points Problems with urination or defecation, sense of pressure in the pelvis, pain
 - 30 points Profuse uterine bleeding during menstruation as well as between menstruations (menometrorrhagia)
- *Other contributing circumstances*
 - 20 points Menometrorrhagia has been treated conservatively and the myoma is not submucosal.

Endometriosis

- *Pain*
 - 50 points Incapacitating pain and recurrent need for analgesics due to endometriosis that has been diagnosed surgically (laparoscopy, biopsy)
- *Disability*
 - 30 points Bleedings due to menometrorrhagia
- *Other contributing circumstances*
 - 30 points Conservative treatment has been Carried out (FinOFTA 2001, treatment scheme: www.stakes.fi/finohta/raportit/019/r109f.html)

Profuse or frequent menstrual bleedings in connection with a regular menstrual cycle

- 60 points Treatment sequence as described in Current care guidelines has been carried out www.kaypahoito.fi

Reference for scoring:

None

Working group:

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FEMALE URINARY INCONTINENCE

ICD disease classification

N39.3 Incontinentia e stressu (stress incontinence)

Primary health care

- Differentiation between stress (effort) incontinence and urge incontinence. (question form: differentiation score less than 7 points)
- Functional deficit assessed on the basis of the replies in the question form.
- Urination diary
- Gynaecological examination and cough test
- Weight reduction is often in order.

Information needed for referral to specialised health care and referral indications

- Other causes for urinary incontinence have been excluded (infections, constipation, medication, psychological causes and dementia).
- Training of pelvic muscles under supervision for 3 months has not alleviated the symptoms.
- Patient has undergone incontinence surgery previously.

Criteria for non-emergency surgical treatment within specialised health care (0-100 points)

The indication for surgery is always based on evaluations case by case. Surgery is considered when the score exceeds 50. If the score is less than 50, treatment is primarily by training of the pelvic muscles. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- *Number of episodes of stress incontinence as recorded in the urination diary*

10 points	Less than 7 per week
20 points	7–14 per week
30 points	more than 14 per week
- *Cough test*

30 points	Positive at moderate bladder filling with patient supine
10 points	Positive at full bladder with patient erect and heavy coughing
- *Disability (functional deficit)*

10 points	0–25%.
20 points	25–50%
30 points	50–75%
40 points	more than 75%.
- *Unless no relief is obtained within 3 months of intensive training, an additional incontinence score is added of*
20 points

Reference for scoring:

Functional deficit (disability) scoring is based on the article by Mäkinen J et al. Virtsainkontinenssin arviointi ja hoito perusterveydenhuollossa (Evaluation and treatment of urinary incontinence in primary health care). Suomen Lääkärilehti (Finnish Medical Journal) 26; 2373; 1992

Current care guidelines:

None

Working group:

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TREATMENT OF INFERTILITY (HORMONE THERAPY, INSEMINATION, IN VITRO AND MICRO FERTILIZATION, SURGERY)

ICD disease classification

N46 Infertilitas masculina (male infertility)

N97 Infertilitas feminae (female infertility)

Primary health care/Information needed for non-emergency referral

- Primary health care provides general information and intervention regarding weight management, smoking and any drug use. The social situation of the family is examined, if needed.
- The referral should include one's anamnesis information and the results of the pap-smear and Chlamydia testing. Information on the blood count and on the concentration of prolactin and thyroid stimulating hormone should be included, as well as the progesterone during the latter half of the menstrual cycle, if considered necessary by the referring physician. The male part should undergo sperm analysis.

Criteria for non-emergency treatment within specialised health care

- A basic principle for choosing how to treat infertility is to employ only therapies with proven effect; unnecessary and repetitive therapies should not be used.
- The possibility of the woman to become pregnant has been ascertained before treatment is instituted: the structure of the female genitals and the function of the ovaries among females, sperm quality among males.
- The likelihood of a successful outcome of the treatment is at least 10% per each therapy cycle, when in vitro fertilization is used. When fertility is treated by hormonal therapy and by insemination, a lower likelihood of success is acceptable. The outcome is assessed by the following circumstances:

The outcome is affected negatively e.g. by a poor response to stimulation (poor responder): high activity (more than 15 – 20 IU/L) of follicle stimulating hormone in the blood during the early part of the menstrual cycle and/or no evidence of ovarian cysts in sonography, poor response when tested with a high dose on FSH, 2) female older than 39 years, 3) difficult-to-manage uterine anomaly, 4) frequent unsuccessful treatment cycles have been undertaken (more than 3 egg collections with associated hormone therapy), and 5) intervention cannot be made safely (e.g., risky puncture in connection with in vitro fertilization therapy)

Circumstances that speak against treatment of infertility within the public health care system:

- The couple has two biological children together
- If either part has been sterilized (consider individual-related circumstances)
- Infectious diseases, e.g., HIV or other virus infections, which require special laboratory conditions

Current care guidelines:

None

Act on Assisted Fertility Treatments, Decree on Assisted Fertility Treatments Act of the Medical Use of Human Organs and Tissues, regulations and guidelines issued by the Finnish Medicines Agency

Working group:

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PROLAPSE OF FEMALE GENITAL ORGANS

ICD disease classification

- N81.0 Urethrocele (prolapse of the urethra into the vagina)
- N81.1 Cystocele (herniation of the bladder into the vagina)
- N81.2, N81.3 Prolapsus uteri (uterovaginal prolapse)
- N81.4 Vaginocele (prolapse of vaginal bottom after hysterectomy)
- N81.5 Enterocoele (prolapse of vaginal fornix into the vagina)
- N81.6 Rectocele (prolapse of rectum into the vagina)

Primary health care/Information needed for non-emergency referral

Only symptomatic prolapsed needs to be treated. Training of the pelvic muscles, control of body weight and a diet to prevent constipation are appropriate and recommended forms of conservative (non-surgical) treatment. Local oestrogen treatment should be given to postmenopausal women to support the mucous membranes.

Criteria for non-emergency surgical treatment within specialised health care (score 0 – 100)

Symptomatic grade II prolapses and prolapses of grade III or more are treated surgically. The indication for surgery is always based on evaluations case by case. The threshold for treatment is a score of 50; treatment decisions that deviate from this must be explained in writing. Surgery is not performed on patients whose score exceeds 50, if surgery is not expected to benefit the patient after due consideration of co-existing diseases and other factors.

- **Severity of prolapse**
 - 0 points Prolapse remains intravaginally (grade I)
 - 20 points Prolapse reaches the introitus of the vagina (grade II)
 - 30 points Prolapse extrudes from the vagina (grade III)
 - 50 points The uterus is located outside the vagina (grade IV)
- **Symptoms**
 - 30 points Sensation of weight, pain during strain
 - 30-50 points The patient has urination difficulties – urination possible only after rest
 - 30 points Defecation requires manipulation through the vagina
 - 30 points Irritation, pain, dyspareunia or haemorrhage due to abrasion of the prolapse
 - 30 points Social withdrawal, reduced mobility

Reference for scoring: None

Current care guidelines: None

Working group:

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JUVENILE DIABETES

ICD disease classification

E10 Diabetes juvenilis (juvenile diabetes)

E11 Diabetes adultorum (type 2 diabetes)

Functions within primary health care

- Primary health care must be able to suspect diabetes on basis of the patient's symptoms and determine the concentration of glucose in the plasma at all times.
- Utensils needed for the treatment of diabetes and for assessment of glucose in the blood and ketones in the blood or the urine are made available as required for appropriate treatment and follow-up of the condition.

Indications for referral to specialised care

- Emergency referral if the fasting glucose concentration in the plasma is 7 mmol/l or more or when sporadically assessed 11 mmol/l or more. If the situation is not clear (e.g., the patient has symptoms compatible with diabetes but the glucose concentration does not exceed the limits mentioned above), a specialist should be consulted by telephone.
- Non-emergency referrals of children with diabetes are only used when the referral is related to other diseases and conditions of the child than diabetes, i.e., when the indications for referral are the same as for non-diabetic patients.

Examinations within specialised health care

- The diagnostics and treatment of children with diabetes is to be carried out by specialised health care or at such units within primary health care that have the needed resources and knowhow (diabetes units).
- The diagnosis of diabetes should be made on an emergency basis if there is a suspicion of juvenile diabetes (type 1 diabetes) and within 3 months when type 2 diabetes is suspected, provided that type 1 diabetes is excluded.

Treatment and follow-up

The treatment and follow-up of diabetes is carried out or managed by a diabetes unit. Treatment should fulfil the requirements stated in the publication Lasten diabeteksen hyvän hoidon laatukriteerit (Quality standards for good diabetes care among children) published by the Development Programme for the Prevention and Care of Diabetes in Finland DEHKO 2000 - 2010 7)

- Treatment is carried out by a multiprofessional team. As a minimum, the team must include a paediatrician with experience in diabetes treatment, a diabetes nurse, a nutritional therapist, a rehabilitation nurse and a social worker.
- Periodical follow-ups and treatment advice can be arranged as required (usually every 3 months)
- The diabetes balance of the patients is evaluated according to national recommendations.
- Screening for diabetes-associated diseases and diabetic complications and their treatment are evaluated according to national recommendations.
- The child and its family are offered a reasonable and fair volume of adaptation training in response to the needs they express

- The unit participates in the quality follow-up of the Development Programme for the Prevention and Care of Diabetes in Finland (DEHKO)

Current care guidelines:

None

Working group:

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DISTURBED GROWTH IN CHILDREN

ICD disease classification

E34.30 – 34.39 Short stature, abnormally slow growth

E34.40 – 34.45 Tall stature, abnormally rapid growth

SHORT STATURE AND TALL STATURE

Examinations within primary health care

- Family history (height and maturation schedule of parents, e.g., menarche of mother, paternal growth pattern), general health state, state of puberty (Tanner G/M- and P-class)

Information needed for referral to specialised health care and referral indications

- Referral indications: Screening limits broken by repeated height measurements (or affirmed by some other technique). Screening limits: Deviation of 2.3 SD from expected height or deviation of 2.7 SD from mean height-for-age if the expected height is not known.
- The referral must include information on the previous height-by-time of the child or adolescent, a description of the stage of puberty and information on the adult height and maturation schedule of the parents.

Examinations within specialised health care

Examinations are tailored individually

SIGNIFICANT SLOWING OR ACCELERATION OF GROWTH

Examinations within primary health care

- Family history (height and maturation schedule of parents, e.g., menarche of mother, paternal growth pattern), general health state, state of puberty (Tanner G/M- and P-class)
- Slow growth: serum thyroid stimulating hormone, serum free thyroxine, blood erythrocyte sedimentation rate, screening blood tests for coeliac disease and – for children below the age of 2 – serum calcium, serum phosphate and alkaline phosphatase
- Accelerated growth: no laboratory tests are needed in primary health care

Information needed for referral to specialised health care and referral indications

- Referral indications: Screening limits broken by repeated height measurements (or affirmed by some other technique), although the results of the tests mentioned above are normal. The screening limits of the relative length are recorded in the growth curve forms.
- The referral must include information on the previous height-by-time of the child or adolescent, a description of the stage of puberty and information on the adult height and maturation schedule of the parents.

Examinations within specialised health care:

Examinations are tailored individually

Current care guidelines: None

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DIAGNOSTICS AND TREATMENT OF DISTURBED PUBERTAL DEVELOPMENT

ICD disease classification

- E22.80 Pubertas praecox centralis (Other hyperfunction of pituitary gland: precocious puberty due to central causes)
- E30.1 Pubertas praecox (precocious puberty)
- E30.00 – E30.09 Pubertas tarda (late puberty)

PRECOCIOUS PUBERTY

Examinations within primary health care

- Family history (height and maturation schedule of parents, e.g., menarche of mother, paternal growth pattern), general health state, state of puberty (Tanner G/M- and P-class)

Information needed for referral to specialised health care and referral indications

- Referral indications: M2 or P2 before age 8 among girls, G2 or P2 before age 9 in boys
- The referral must include information on the previous height-by-time of the child or adolescent, a description of the stage of puberty and information on the adult height and maturation schedule of the parents (e.g., menarche of mother, paternal growth pattern).

Examinations within specialised health care

Examinations are tailored individually

DELAYED PUBERTY

Examinations within primary health care

- Family history (height and maturation schedule of parents, e.g., menarche of mother, paternal growth pattern), general health state, state of puberty (Tanner G/M- and P-class)
- Exclusion of hypothyroidism and gastrointestinal diseases (serum thyroid stimulating hormone, serum free thyroxine, blood count, blood erythrocyte sedimentation rate, screening blood tests for coeliac disease), unless the family history explains the child's delayed puberty.

Information needed for referral to specialised health care and referral indications

- Referral indications: Measures to promote puberty, suspicion of reduced secretion of sex hormones (hypogonadism). Delayed puberty: M2-stage not reached before 13.0 years of age among girls and G2-stage not reached before 13.5 years of age among boys. If either one of the child's parents had late puberty, the above age limits may be moved 1 year forward, provided that the child has no symptoms of illness.
- The referral must include information on the previous height-by-time of the child or adolescent, a description of the stage of puberty and information on the adult height and maturation schedule of the parents (e.g., menarche of mother, paternal growth pattern).

Examinations within specialised health care

Examinations are tailored individually

Current care guidelines:

None

Working group:

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TREATMENT OF OBESITY AMONG CHILDREN

ICD disease classification

E66.00 - E66.9 Obesitas (obesity)

Examinations within primary health care

- The weight of the child must be put in relation to the mean height-for-weight:
 - Overweight: height-for-weight exceeds +20%
(for children below school-age +10%)
 - Obesity: height-for-weight exceeds +40%
(for children below school-age +20%)
 - Severe obesity: height-for-weight exceeds +60%
- Blood pressure (overweight and obese children)
- Serum thyroid stimulating hormone and free thyroxin to exclude hypothyroidism (severe obesity, or relative reduction of growth [growth curves] at time of weight increase)
- Cholesterol, LDL-cholesterol, HDL-cholesterol, triglycerides (obese and severely obese children)
- If a severely obese child is treated according to the local treatment chain within primary health care, also the fasting plasma glucose concentration (or a glucose tolerance test) and serum alanine aminotransferase need to be measured

Information needed for referral to specialised health care and referral indications

- Severe obesity (height-for weight >+60%) or very fast weight increase due to accumulation of fat (unless the local treatment chain provides different instructions)
- Suspicion or establishment of non-dietary weight increase (reduced relative height during weight increase)
- Suspicion of an obesity-related syndrome (retardation of mental development, abnormal facial or body features) or monogenic mutation syndrome (obesity before age 2 years)
- In addition to obesity, the child has or may have significant risk factors for cardiovascular diseases (repeatedly cholesterol >5.5 mmol/l or LDL-cholesterol >4.0 mmol/l or triglycerides >2.0 mmol/l despite nutritional advice, blood pressure at four consecutive measurement >115/75 mmHg for children below school-age, >125/85 for children in primary school or >140/90 for adolescents)
- High concentration of fasting blood glucose or abnormal glucose tolerance test
- Alanine aminotransferase activity exceeds reference value repeatedly
- Disturbed breathing during sleep (audible, near-nightly snoring or irregular breathing during sleep)
- Irregular menstruation, severe acne or hirsutism, acanthosis nigricans
- The referral must include information on the previous height-by-time of the child or adolescent and information on the adult height of the parents

Role of specialised health care

- Differential diagnostics, if needed
- Diagnostics and treatment of obesity-related complications
- Planning treatment of obesity
- Feed back to primary health care for execution of antiobesity treatment

Current care guidelines (child obesity):

www.kaypahoito.fi

Working group:

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EXAMINATIONS FOR RECURRENT INFECTIONS IN CHILDREN

ICD disease classification

The diagnosis of recurrent upper respiratory tract infections in children may be ICD10-coded by J08.80 (Other acute upper respiratory infections of multiple sites) and the code may be complemented with a specific ICD10-code that describes the current infection (e.g., acute suppurative otitis media H66.0). There is no definition of recurrent infections in children that has been agreed upon; pre-school aged children, even if healthy, have 5 – 8 common infections annually.

Functions within primary health care

- There should be one physician who is responsible for the management of the patient (e.g., family physician). These patients should be treated by on-call services as little as possible.
- Social intervention: Information on smoking for the parents, day care arrangements, if possible, for the child
- Screening for other diseases: Clinical examination and evaluation, chest radiography, blood count, no allergy testing unless the child has asthma

Indications for referral to specialised care

(to a paediatric unit for examinations due to abnormal sensitivity to infections)

- More than 4 bacterial infections within 1 year (if the infections are recurrent otitis, the child should be referred to an otological unit)
- More than 2 invasive (internal) bacterial infections (e.g., pneumonias) within 1 year
- Rare or uncommon infectious agent
- Growth retardation and/or prolonged diarrhoea and/or severe eczema
- Recurrent otitis despite tympanostomy and adenotomy
- Indications for tympanostomy in a child older than 5 years
- Chronic or recurrent sinus infections

Examinations within specialised health care

- Diagnostics or exclusion of asthma, gastro-oesophageal reflux disease, immunodeficiencies and other chronic illnesses

Follow-up within specialised health care (paediatric unit):

- Treatment plans for asthma, reflux disease, immunodeficiencies and other chronic illnesses
- social interventions and appointing a family physician in collaboration with primary health care

Current care guidelines: None

Working group:

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CHRONIC COUGH (MORE THAN 6 WEEKS) AND ASTHMA IN CHILDREN

ICD disease classification

- J45 Asthma bronchiale (asthma)
- J21.9 Bronchiolitis acuta non specificata (acute bronchiolitis, unspecified)
- R05 Tussis (cough)
- R06.0 Dyspnoea
- R06.2 Respiratio sibilans (wheezing)

Examinations within primary health care

- History: past breathing difficulties, food allergy diagnosed by a physician, infantile atopic eczema or allergic rhinitis/conjunctivitis, asthma in the family, impact of exercise, time of the day and time of the year on symptoms, possibility of foreign body, passive smoking, active smoking
- Physical examination: specific findings of physical examination of ears, nose, throat, lungs and heart, skin
- Chest x-ray
- If needed: radiography of sinuses of children above 4 years of age
- School-aged children: spirometry and follow-up of peak expiratory flow at home including bronchodilator testing
- In children with cough, antibody testing against pertussis, Mycoplasma and Chlamydia, if needed
- Growth curve

Indications for referral to specialised care

- These studies show that the patient has asthma (patient who have symptoms only during the pollen season should be diagnosed conservatively)
- No diagnosis of asthma, but the child has recurrent dyspnoea, exercise tolerance is poor, symptoms continue and/or growth is retarded

Role of specialised health care

- Exercise spirometry for school-aged children
- Oscillometry, if considered appropriate, for pre-school children (3 – 7 years)
- Pricktesting or IgE-screening
- Planning of medication
- Instructing technique for administration of medication, checking correctness of administration by follow-up
- Feed back regarding treatment results
- Certificates, physician's statements

Follow-up within specialised health care

- Severe asthma
- Asthma among pre-school aged children
- Others: follow-up according to regional agreements and by individual consideration (children with symptoms only during pollen seasons are generally followed up within primary health care)

Current care guidelines (asthma)

www.kaypahoito.fi

Working group:

Jukka Ollikainen, City of Mikkeli, Matti Korppi Tampere University Hospital,
Minna Kaila Tampere University Hospital, Mika Mäkelä Hospital District of
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ABDOMINAL PAIN IN CHILDREN

ICD disease classification

- A04.8 Infectio gastrointestinalis helicobacterialis
(intestinal *Helicobacter pylori* infection)
- E73.1 Deficientia lactasae secundaria (secondary lactase deficiency)
- K21.9 Refluxus oesophagi (gastro-oesophageal reflux)
- K30 Dyspepsia
- K50.9 Morbus Crohn (regional enteritis)
- K51.9 Colitis ulcerosa (ulcerous colitis)
- K90.0 Coeliacia (coeliac disease, gluten enteropathy)
- R10.4 Dolor abdominis (abdominal pain)

Examinations within primary health care

Initial examinations are made as dictated by the severity of symptoms

- examination of lactose intolerance among school-aged children (primarily exclusion diet testing, lactose tolerance test, gene testing only rarely needed)
- exclusion of coeliac disease by antibody assessment
- blood count, erythrocyte sedimentation rate and urinalysis to exclude systemic diseases
- Assessment of faecal calprotectin content, if inflammatory bowel disease is suspected
- assessment of faecal *Helicobacter pylori* antigen, if *Helicobacter pylori* infection is suspected

Information needed for referral to specialised health care and referral indications

- Protracted abdominal pain and highly symptomatic patient who due to the condition has not been able to attend school; primary health care has not been able to identify the causes for the abdominal symptoms or the growth of the patient is retarded
- Suspicion of reflux disease
- Suspicion of oesophagitis

Suspicion of inflammatory bowel disease

- Prolonged diarrhoea
- To verify a suspicion of coeliac disease
- To verify *Helicobacter pylori* infection
- Information of the growth of the child are submitted with the referral

Examinations within specialised health care

- Examinations are tailored individually

Current care guidelines (coeliac disease, diagnosis and treatment of *Helicobacter pylori* infection, treatment of Crohn's disease): www.kaypahoito.fi

Working group:

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CHILD WITH CUTANEOUS AND ABDOMINAL SYMPTOMS (SUSPICION OF FOOD ALLERGY)

ICD disease classification

- K52.2 Gastroenteritis allergica/diaetetica
(allergic and dietetic gastroenteritis and colitis)
- L27.2 Dermatitis ex cibo devorato (dermatitis due to ingested food)

Examinations and follow-up within primary health care

- History: diet history
- Growth curve
- Treatment of eczema and itch
- Avoidance and dietary testing at home or exposition according to capabilities
- Children with the following characteristics should be followed up by the primary health care system: 1) insignificant symptoms, 2) normal growth and development, 3) only one foodstuff needs to be avoided for therapeutic reasons (the child may be allergic to other foodstuffs but these are of no consequence for the child's nutrition), and 4) school-aged children

Indications for referral to specialised care

- The child has widespread or difficult-to-treat eczema
- The child's symptoms accelerate gradually (repeated contacts with health care system)
- The child's diet becomes too exclusive on the family's own accord
- Growth disturbance (deviation in screening for height-for-weight)
- Suspicion of foodstuff-related anaphylaxis
- Symptoms give rise to suspicion of allergy to crucial nutrients (milk, wheat)

Examinations within specialised health care

- Verification of the diagnosis and examinations
Exposition testing: Exposition to milk, wheat or other pertinent substance
Allergy testing, if needed
- Treatment planning and instructions
If exposition testing to milk is positive, milk/milk products must be avoided for a given period of time and replaced by 1) children under 6 months of age digested special product for infants, 2) children aged 6-24 months soy product (primarily nondigested), and 3) children above 2 years of age calcium substitution
- Instructions by diet therapist
Avoidance diet for patients with intolerance to foods containing several crucial nutrients
- Milk allergy: Special problems have turned up when diet has been implemented, or the child's growth has become retarded

Follow-up within specialised health care

- Children with severe symptoms
- Children with very restricted diets
- Children with marked difficulties in expanding the diet
- Growth problems
- Children with some concomitant disease requiring follow-up within specialised health care, e.g., asthma

Current care guidelines (food allergy in children):

www.kaypahoito.fi

Working group:

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CONSTIPATION IN CHILDREN

ICD disease classification

K59.0 Constipation

Q43.1 Morbus Hirschsprung

(Hirschsprung's disease or congenital aganglionic megacolon)

Functions within primary health care

- Primary diagnostics within primary health care to identify the cause for constipation (e.g., hypothyroidism)
- Evaluation of mild and moderate constipation and treatment with dietary modifications, lactulose, sodium picosulfate and PEG 3350a

Indications for referral to specialised care

- Constipation during first year of life: referral always indicated
- Sever constipation with beginning after first year of life, if the above treatment does not clearly alleviate the constipation or if the situation has entered a vicious circle (fear of defecation, eating disorder and/or parental anxiety)

Examinations within specialised health care

- Constipation during first year of life:
 - 1) Rectal biopsy if there is a suspicion of Hirschsprung's disease
 - 2) examinations with regard to food allergy, if needed, and
 - 3) initiation of colon evacuations under ward conditions, if needed
- Constipation starting after the child's first year of life: Testing for coeliac disease, hypothyroidism and allergies, as needed

Current care guidelines:

None

Working group:

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NOCTURNAL AND DAYTIME ENURESIS IN CHILDREN

ICD disease classification

- F98.00 Enuresis nocturna non organica (nonorganic nocturnal enuresis, involuntary emptying of the bladder during sleep of a healthy child aged more than 5 years)
- F98.01 Nonorganic daytime enuresis (involuntary, daytime enuresis only, urinary incontinence in a child aged more than 5 years)
- F98.02 Nonorganic nocturnal and diurnal enuresis

Examinations within specialised health care

- Children with nocturnal enuresis do not require specific examinations, but an enuresis diary must be kept
- Children with daytime, mixed and secondary enuresis* need to be tested for urinalysis and an enuresis diary must be kept for at least two weeks
- If the services of a dedicated radiologist are available, primary health care may perform sonography of the kidneys and urinary tract of the child

Indications for referral to specialised care

- Suspicion of structural pathology of the urinary tract This is implied, e.g., by 1) the child being constantly wet and not being dry at all, 2) the child having a urinary tract infection or pain on urinating, 3) the child having also constipation or encopresis (faecal soiling)

Examinations within specialised health care

- Examinations to assess the structure of the urinary tract, performed once
- Sonography, including assessment of the volume of residual urine in the bladder, is performed, unless this examination has been made previously if previous examinations have shown abnormal findings
- Contrast radiography during urination (micturition cystography) is made if considered necessary (e.g., after previous symptomatic urinary tract infection)
- Contrast imaging of the urinary tract (urography, renography or MRI-urography) is only performed if the structural defect of the urinary tract is not clear by sonography
- Urinary flow and residual volume measurements are made to examine children with daytime enuresis or mixed enuresis
- More detailed studies on the function and functional disturbances of the urinary system are made if needed
- Cystoscopy, if considered necessary, is made to study structural abnormalities of the urinary tract

Current care guidelines: None

Working group:

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* Primary enuresis refers to a situation where the child has never learned to be dry and secondary enuresis to a situation where the child has been dry for at least 6 months but where enuresis has returned after that.

CHILDREN WITH JOINT AILMENTS

ICD disease classification

- M08 Arthritis juvenilis (juvenile arthritis)
- M25.5 Arthralgia (joint pain)
- M24.5 Contractura articulationis (limited movement [contracture] of joint)
- M25.6 Rigiditas articulationis (stiffness of joint, not elsewhere classified)

Examinations within primary health care

- History: Duration of symptoms, morning stiffness, influence of strain, limping, general symptoms. Can the injury mechanism explain the symptoms?
- Physical examination: Detailed general physical examination and examination of each joint (swelling, redness, warmth, movement limitation, pain on movement)
- Other examinations: Radiograph and sonography after careful consideration, laboratory tests (erythrocyte sedimentation rate, C-reactive protein, full blood count)

Indications for referral to specialised care

- Limping for unknown reason or otherwise limited movement of extremity of unknown cause
- Joint inflammation with a duration of more than 2 weeks
- Joint pain for more than 2 weeks and elevated erythrocyte sedimentation rate
- Limited joint movement
- Strong suspicion of juvenile rheumatoid arthritis or systemic collagen disease

Role of specialised health care (profound knowledge of juvenile arthritis)

- Diagnostics of chronic illnesses
- Primary responsibility for treating chronic illnesses
- Local treatment of joints within two weeks of identified need for care

Follow-up at university clinic

- Systemic rheumatic diseases

Rheumatism Foundation Hospital

- Patients who require institutional rehabilitation on a national level

Current care guidelines:

None

Working group:

Risto Lantto North Karelia Central Hospital, Pekka Lahdenne Hospital District of Helsinki and Uusimaa, Kristiina Aalto Hospital District of Helsinki and Uusimaa, Liisa Kröger Kuopio University Hospital, Raimo Voutilainen Kuopio University Hospital

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EXAMINATIONS REQUIRED BY CARDIAC MURMUR IN A CHILD

ICD disease classification

- R01 Murmura cardiaca et alii soni cardiaci
(murmurs and other abnormal cardiac sounds)

Examinations within primary health care

When an abnormal cardiac murmur is identified by auscultation of a healthy child, the following examinations should be made:

- General status with special emphasis on finding on auscultation of all areas of the heart with the child sitting and lying down
- Blood pressure in right upper and right lower extremity with the child lying down
- Pulse
- Growth curve

Additional examinations (ECG and chest radiography) are carried out as judged by the physician, and the results, together with data on the child's growth, are sent together with the referral to specialised health care, if referral is considered appropriate

Indications for referral to specialised care

(if a cardiological evaluation has not been carried out)

- Child aged less than 6 (-12) months
- Infant with symptoms
- Femoral pulses not palpable or only weakly palpable, supine systolic blood pressure higher in upper extremity than lower extremity
- Maximum volume of murmur (punctum maximum) located dorsally, between the shoulder blades
- Loud murmurs (grade 3/6 or louder)
- Uninterrupted murmur, unchanged by supine or standing position
- Maximum volume of murmur (punctum maximum) located in aortic or pulmonary area, unless the murmur is due to continuous venous flow which is an innocent finding
- Constantly divided second heart sound
- Strictly diastolic murmur

Examinations within specialised health care

- General physical examination, growth curve
- Echocardiography, if needed
- ECG, chest radiography, if needed
- Examination by paediatric cardiologist, if needed
- Planning of treatment and follow-up

Current care guidelines: None

Working group:

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URINARY TRACT INFECTIONS IN CHILDREN

ICD disease classification

N10 Acute pyelonephritis

N30.0 Acute cystitis

Examinations within primary health care

Urinary tract infections (UTI) should be identified within primary health care and classified into either pyelonephritis (kidney level) or cystitis (bladder level). UTI of babies are always classified as pyelonephritis. In older children, pyelonephritis is suggested by fever ($>38.5^{\circ}\text{C}$) and a concentration of the C-reactive protein in the plasma $> 40 \text{ mg/l}$.

BABIES

For collection a screening urinary sample of a baby, a collection bag or collection cushion is used. A normal urinary dipstick result usually excludes the possibility of a UTI, but if leucocytes or nitrites are positive on a dipstick test, urinary bladder puncture is indicated. Any bacterial growth in a sample taken by urinary bladder puncture is clinically significant. Since dipstick test may be falsely negative, a urine sample must always be taken for culture if there is a suspicion of UTI.

OLDER CHILDREN

Sampling of midstream urine: If nitrite or leukocytes are positive on dipstick testing, UTI must always be suspected and the urine must be cultured for bacteria, and a second sample of midstream urine should be taken, including urine culture. A diagnosis of UTI is made, if the same bacterium grows in two samples, the number of colonies is $\geq 10^5$ and the antibiogram (sensitivity profile) of the two cultures is the same in a patient with leukocytes in the urine (leukocyturia).

Sonography (ultrasound examination) of kidneys and urinary tract

- for all male patients
- for all female patients with pyelonephritis
- for females under the age of 5 years with cystitis
- for females above the age of 5 years with recurrent cystitis

Indications for referral to specialised care

Emergency referral

- infants suspected of urinary tract infection
- older children whose general condition is affected due to pyelonephritis

Non-emergency referral

- older children with a good general condition and who have had pyelonephritis diagnosed in primary health care
- for establishing the aetiology of recurrent lower urinary tract infections (cystitis)
- if sonography of the urinary tract gives an abnormal result

Examinations within specialised health care

- Examinations are planned and managed according to local practice

Current care guidelines (urinary tract infections): www.kaypahoito.fi

Working group: Pekka Arikoski Kuopio University Hospital, Tarja Heiskanen-Kosma Kuopio University Hospital, Seppo Taskinen Hospital District of Helsinki and Uusimaa, Raimo Voutilainen Kuopio University Hospital

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CHILDHOOD EPILEPSY

ICD disease classification

G40 Epilepsia

Functions within primary health care

- Identification of seizure symptoms and other symptoms related to epilepsy

Indications for referral to specialised care

- One isolated seizure that could be epileptic (related to movement, sensations or consciousness) or symptom that could be related to epilepsy (e.g., growth retardation, delayed speech development)
- Recurrent epileptic seizures or suspicion of epilepsy requires urgent referral (within 21 days) to specialised health care)

Role of specialised health care

- Diagnostics and differential diagnostics of seizures, including EEG/video-EEG, MRI
- Initiation of treatment, instructions and guidance, follow-up (clinically and with laboratory testing) and planning of treatment discontinuation
- Treatment management of children with difficult-to-treat epilepsy (e.g., arrangement for epilepsy surgery)
- Multiprofessional follow-up of the neurological, intellectual and social development of the child
- Planning of training, education, rehabilitation and career

Follow-up within specialised health care

The responsibility for managing children with epilepsy may be transferred from a child neurologist or specialised health care::

- To a paediatrician, if appropriate: provided that the therapy is in good balance, no seizures and no developmental problems
- To a physician specialised in developmental disability when special services are needed and other symptoms than epilepsy are more significant from the point of view of the child's growth and development
- To a neurologist: by age (15 – 18 years)
- Re-referral to specialised health care must be guaranteed, if the seizure control deteriorates

Current care guidelines (Childhood epilepsy and febrile seizures, Prolonged epileptic seizure)

www.kaypahoito.fi

Working group:

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TREATMENT OF CHILDHOOD HEADACHE

ICD disease classification

G43 Hemikrania (migraine)

G44 Alia syndromata cephalgica (other headache syndromes)

Functions within primary health care

- Diagnostics, treatment and prevention of primary headaches (migraine, tension headache)
- Identification of the causes and treatment or referral for treatment of the most common forms of secondary headache (e.g., extracranial infections of the head, dental causes, ophthalmological causes)
- Identification and treatment of the common headache-triggering psychological stress factors (e.g., school bullying, learning difficulties and stressors within the family)
- Continued treatment, if needed, of patients that have been assessed within specialised health care because of recurrent or chronic headache

Information needed for referral to specialised health care and referral indications

- Patients who require emergency consultation: suspicion of intracranial infection, circulatory disturbance, intracranial pressure increase or some other intracranial process as a cause for headache; migraine attack requiring intravenous drug treatment
- Indication for non-emergency referral: prolonged or recurrent headache that does not respond adequately to treatment within primary health care or becomes worse
- The referral should contain information on the character of the headache, the child's previous illnesses, growth and development, social environment and conditions, and on the results of any examinations that may have been carried out and any treatment that has been given and the results of the treatments

Role of specialised health care

- Examinations, treatment and follow-up of headache caused by intracranial infections, circulatory disturbances, increased intracranial pressure or other intracranial illness
- Examinations related to migraine attack requiring intravenous drug treatment and provision of treatment
- Neuroradiological and laboratory examinations possibly needed for assessment of the reasons for recurrent or chronic headache, sleep polygraphy, EEG, examinations related to physical and rehabilitation medicine and psychiatry

Current care guidelines (childhood headache)

www.kaypahoito.fi

Working group:

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TREATMENT OF CHILDHOOD DEVELOPMENT ABERRATIONS

ICD disease classification

- E70-E90 Perturbationes metabolismi (disturbances of metabolism)
- F70-F79 Retardatio mentalis (mental disability)
- F80-F98 Developmental disturbances of, e.g., perception, attention, speech and language, social interaction, learning and motor functions (e.g., ADHD, dysphasia, autism and Asperger's syndrome, dyslexia)
- G47 Perturbationes somni (organic sleep disorders)
- G80-G99 E.g., paralysis cerebialis infantilis (infantile cerebral palsy syndrome)
- Q00-Q99 E.g., brain malformations and chromosome aberrations

Functions within primary health care

- Identify and differentiate benign developmental variations and mild developmental deviations from more serious developmental disability
- Initiate immediately supportive measures once the problem has been identified and described by a multiprofessional team within primary health care

Information needed for referral to specialised health care and referral indications

- The child has abnormal findings on physical examination by a physician
- Serious, polysymptomatic special problems
- Severe special abnormality of speech and language development
- Drug therapy is considered (e.g., for ADHD, tics)
- Severe attention-deficit hyperactivity disorder (referral for treatment by child neurologist/child psychiatrist according to the recommendations of the current care guidelines)
- Suspicion of developmental disability or broad developmental disturbance (e.g., severe autism spectrum illnesses)
- Suspicion of disease of motor function (cerebral palsy, muscle diseases)
- Suspicion of progressive neurological disease
- The referral should contain information of the examination results and assessment of the multiprofessional team

Examinations within specialised health care

- Etiological examinations are tailored individual

Follow-up

- Children with severe and multifaceted disability are followed up within specialised health care or with the services for developmentally disabled persons
- Children with milder disturbances are followed up with primary health care. Regardless of the degree of severity of the disability, all supportive measures are provided in the child's close environment in collaboration with day care workers, teachers etc.; management of this network is mainly the responsibility of the primary health care system

Current care guidelines (treatment for attention-deficit hyperactivity disorder (ADHD) in children and adolescents): www.kaypahoito.fi

Working group: Lennart von Wendt Hospital District of Helsinki and Uusimaa, Kai Eriksson Tampere University Hospital, Reija Alén Central Hospital of Central Finland, Juha Viitala South Carelia Central Hospital, Raimo Voutilainen Kuopio University Hospital

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CATARACT

Primary health care

- These criteria are applied for referral of patients to specialised health care and for making decisions on cataract surgery

Information needed for non-emergency referral

- The referral must contain information on the patient's visual acuity and other circumstances related to the decision to operate
- Before the patient is referred to specialised health care, the referring physician must make sure that the patient's visual problems are not due to a lack of eyeglasses, or unsuitable eyeglasses or to some other condition than cataract.

Criteria for non-emergency surgical treatment within specialised health care

Treatment is based on the patient's visual disability which may prohibit the patient from driving or from reading properly. The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies:

- Visual acuity of the better eye with best lens correction 0.5 or less
- If the visual acuity of the better eye is better than 0.5, the criterion for operation of the poorer eye is a visual acuity of 0.3 or less with best lens correction.
- Functions of daily living are significantly compromised because of the cataract
- Surgery of one eye has resulted in a disturbingly big difference in the refraction of the eyes (more than 2 diopters).
- The patient experiences some other significant disability due to the cataract (e.g., cataract prohibits laser therapy of diabetic retinopathy)

It may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

Current care guidelines (Cataracts in adults)

www.kaypahoito.fi

Working group:

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DIABETIC EYE DISEASE

ICD disease classification

H36 Retinopathia recessualis, praeproliferativa, proliferativa et maculopathia diabetic (Diabetic retinopathy)

Primary health care

Regional retinal photography systems and archives are the basis for screening retinal photography. Written assessment of the screening images is primarily the responsibility of the one who performs the retinal photographs.

Frequency of retinal photography

- At time of diagnosis
- Childhood juvenile diabetes: Annual photography of the retinae as of adolescence
- Adult juvenile diabetes: 1) If there are no retinal changes, photography is performed at two-year intervals. 2) if there are retinal changes, photography is performed annually.
- Adult diabetes: 1) If there are no retinal changes, photography is performed at three-year intervals. 2) If there are minute retinal changes, photography is performed at two-year intervals. 3) If there are retinal changes, photography is performed annually (or the patient is referred for evaluation of treatment needs)

Information required in non-emergency referral

- Visual acuity, description of findings at retinal photography (and/or submission of photographs together with referral) and information on the patient's diseases and diabetic complications

Specialised hospital care

- If the patient has proliferative retinopathy, laser treatment should preferably be initiated in connection with the first visit, once the need for treatment has been established

Follow-up

- The management of patients who have undergone laser treatment is agreed upon together with the primary health care and the specialised health care

Current care guidelines (Diabetic retinopathy): www.kaypahoito.fi

Working group: Anja Tuulonen Oulu University Hospital, Eero Aarnisalo Central Hospital of Satakunta, Esko Aine Tampere University Hospital, P Juhani Airaksinen Oulu University Hospital, Tero Kivelä Hospital District of Helsinki and Uusimaa, Matti Kontkanen North Karelia Central Hospital, Tapani Korhonen Central Hospital of Kainuu, Pentti Koskela Central Hospital of Lapland, Juha Kursu Central Hospital of Länsi-Pohja, Jaakko Leinonen Central Hospital of Vaasa, Eeva Nikoskelainen Turku University Central Hospital, Aila Pierides Central Ostrobothnia Central Hospital, Olavi Pärssinen Central Hospital of Central Finland, Markku Teräsvirta Kuopio University Hospital, Markku Rämö South Carelia Central Hospital, Pertti Sippola South Ostrobothnia Central Hospital, Raimo Uusitalo Hospital District of Helsinki and Uusimaa, Marja-Liisa Vuori Turku University Central Hospital, Juha Välimäki Central Hospital of Päijät-Häme

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GLAUCOMA

ICD disease classification

H40.10-H40.19 Open-angle glaucoma
(e.g., glaucoma simplex, capsulare et non hypertensivum)

Primary health care

- Each general practitioner should know the following about open-angle glaucoma: 1) a normal acuity of central vision and a statistically normal intraocular pressure (10 – 21 mmHg) do not exclude the possibility of open-angle glaucoma, 2) finger perimetry will identify only very advanced cases, 3) glaucoma medicines, including eye drops, may cause adverse events in other parts of the body outside the eyes, 4) certain risk factors increase the risk of glaucoma (e.g., glaucoma in close relatives and myopia) (Current care guidelines)
- Each general practitioner should know how to diagnose an acute episode of closed-angle glaucoma and provide emergency treatment.

Information required in non-emergency referral

- Visual acuity, intraocular pressure level, risk factors, general illnesses and medication.

Specialised hospital care

- Diagnostics, follow-up and treatment of open-angle glaucoma requires ophthalmological special apparatus and specialist knowhow
- The hospital district may produce the necessary service itself, obtain it from subcontractors or by appropriate use of the resources of the primary health care system.
- The specialised health care system is responsible for arranging the treatment and follow-up of glaucoma patients.

Follow-up

- Follow-up should reach the good standards as documented in the Current care guidelines (visual fields and photography either of the nerve fibre layer or of the optic disc at intervals of 1 -2 years) The minimum requirement is that the level of follow-up is at least satisfactory, as described in the Current care guideline (visual fields annually)
- The physician designs an individual follow-up and treatment plan based on the intraocular pressure, retinal photography and visual field examination

Current care guidelines (open-angle glaucoma): www.kaypahoito.fi

Working group: Anja Tuulonen Oulu University Hospital, Eero Aarnisalo Central Hospital of Satakunta, Esko Aine Tampere University Hospital, P Juhani Airaksinen Oulu University Hospital, Tero Kivelä Hospital District of Helsinki and Uusimaa, Matti Kontkanen North Karelia Central Hospital, Tapani Korhonen Central Hospital of Kainuu, Pentti Koskela Central Hospital of Lapland, Juha Kursu Central Hospital of Länsi-Pohja, Jaakko Leinonen Central Hospital of Vaasa, Eeva Nikoskelainen Turku University Central Hospital, Aila Pierides Central Ostrobothnia Central Hospital, Olavi Pärssinen Central Hospital of Central Finland, Markku Teräsvirta Kuopio University Hospital, Markku Rämö South Carelia Central Hospital, Pertti Sippola South Ostrobothnia Central Hospital, Raimo Uusitalo Hospital District of Helsinki and Uusimaa, Marja-Liisa Vuori Turku University Central Hospital, Juha Välimäki Central Hospital of Päijät-Häme

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BENIGN SKIN PATHOLOGY IN THE HEAD AND NECK ARE

ICD disease classification

D22 Naevi melanocytici (pigment naevus)

D23 Alia neoplasmata benigna cutis (benign cutaneous tumours)

Primary health care/Information needed for non-emergency referral

- The skin tumour must, as a general rule, be verified by cytology or histology
- Referral to specialised care is indicated and these investigations are not to be performed in the following instances: 1) strong suspicion of malignant skin tumour, 2) tumour located in a difficult place (e.g., ear lobe, nose, eye lid, lips), 3) surgery need to be complemented with skin plasty, or 4) previous operation requiring revision

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Strong cosmetic and functional disability diagnosed by a physician

Current care guidelines:

None

Working group:

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RECURRENT OR CHRONIC TONSIL DISEASE

ICD disease classification

- J03 Angina tonsillaris (acute tonsillitis)
- J35.0 Tonsillitis chronica (chronic tonsillitis)
- J36 Abscessus peritonsillaris (peritonsillar abscess)
- J03.9 Tonsillitis acuta non specificata (acute tonsillitis, unspecified)
- J35 Morbi chronici tonsillarum (chronic diseases of tonsils and adenoids)
- R50.9 Febris e causa ignota (periodic fever in children for unknown reason)

Primary health care/Information needed for non-emergency referral

- Information regarding past tonsil infections and related examinations (especially on any infections caused by beta haemolytic Streptococci) and therapies
- Information regarding any obstructive symptoms from the respiratory tract and pharynx.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Recurrent febrile pharyngitis: 1) 3 – 4 infections annually: fever, throat pain, general symptoms, inflamed and often coated tonsils, 2) group A betahaemolytic Streptococci have grown on bacterial cultures of throat swabs, 3) if symptoms are disturbing, also Streptococcus-negative patients with throat infections
- Chronic pharyngitis: Malodorous breath, tonsils with crypts, throat pain, 2) inflamed tonsils which on compression of crypts produce pus or tonsiloliths
- Periodic fever in children: recurrent fever episodes with a duration of a few days, 2) suspicion of pharyngitis and no signs of other infection foci
- Obstruction of the nasopharyngitis due to big adenoids and(or) tonsils: Obstructive breaks in breathing at night, i.e., sleep apnoea, in children (cf. adult sleep apnoea), stuffy nose, dysphagia and symptoms due to malocclusion, 2) a physical examination reveals large tonsils/adenoids or open bite because of oral breathing

Current care guidelines (pharyngitis)

www.kaypahoito.fi

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DESENSITISATION FOR ALLERGIC RHINITIS (SPECIFIC IMMUNE THERAPY)

ICD disease classification

- J30.10 Rhinitis allergica ex polline (allergic rhinitis due to pollen, hay fever)
- J30.3 Rhinitis allergica (other allergic rhinitis, non-seasonal)

Primary health care/Information needed for non-emergency referral

- Allergic rhinitis with severe symptoms and eye symptoms, when pharmacotherapy does not provide sufficient relief or the need for medication is excessive or prolonged.
- Treatment with local glucocorticosteroid, antihistamines and eye drops has been carried out appropriately for at least one pollen season before the decision to desensitise is taken.

Specialised hospital care

- The results of prick or RAST-testing are compatible with pollen allergy; the allergy has produced severe symptoms during at least two consecutive pollen seasons.
- In selected cases, exposition testing (on nasal mucous membrane) with suspected allergen (e.g., if there is discrepancy between the patient's history, prick test result or the RAST-test result).
- In selected cases also treatment against animal allergens (e.g., if the patient has allergic rhinitis due to professional exposure to animal allergens)

Current care guidelines (desensitisation)

www.kaypahoito.fi

Working group:

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RECURRENT AND/OR CHRONIC SINUS INFECTIONS

ICD disease classification

- J32 Sinuitis chronica (chronic sinusitis)
- J01 Sinuitis acuta (recidivans) (recurrent acute sinusitis)
- J33 Polypus nasi (nasal polyp)
- J34.1 Cysta sinus paranasalis (paranasal cyst and/or mucocoele)

Primary health care/Information needed for non-emergency referral

- The general practitioner should attempt to demonstrate secretion into the sinus by performing sinus puncture, obtaining a sinus radiograph or by performing a sinus sonographic scan.
- The referral should include information on at least three separate episodes of sinus infection.
- The referral must include information that the appropriate conservative treatment for chronic sinusitis and acute recurrent sinusitis has been carried out and that the possible causes for the condition have been examined.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Chronic (symptoms for more than 2 – 3 months), symptomatic sinusitis
- Acute sinusitis at least 3 - 4 times annually
- Nasal polyps
- And also: Inflammatory changes in sinuses as judged by a specialist physician on computed tomograms

Current care guidelines (sinusitis)

www.kaypahoito.fi

Working group:

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NASAL CONGESTION

ICD disease classification

J34.2 Deviatio septi nasi (deviated nasal septum)

J34.3 Hypertrophia concharum nasi (hypertrophy of nasal turbinates)

Primary health care/Information needed for non-emergency referral

- Imaging of nasal passages before and after constriction of mucous membranes.
- The referral must include information that the appropriate conservative treatment for chronic nasal congestion has been carried out and that the possible causes for the condition have been examined.

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations by an expert specialist physician case by case. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- A clinical examination by a specialist physician has identified a structural deviation in the nose: Nasal septum deviation causing obstruction of the airways, 2) impression of the nasal wing (e.g., after fracture) causing a stenosis of the airways or excessive inward movement of the cartilaginous part of the nasal wing during inhalation, 3) hypertrophy causing congestion of the turbinates, or 4) septum deviation causing neuralgia (Sluder's neuralgia), increasing the risk of sinusitis or worsening of snoring or sleep apnoea.
- Measurement of the horizontal area of the nasal passages and/or of air flow (acoustic rhinometry and/or rhinomanometry) is recommended

Current care guidelines:

None

Working group:

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OBSTRUCTIVE SLEEP APNOEA AND SNORING

Conservative treatment: cf. Pulmonary diseases s. 205

ICD disease classification

G47.3 Apnoea intrasomnalis obstructiva (obstructive sleep apnoea)

R06.5 Respiratio peroralis (snoring)

Primary health care

- Identification of condition
- Assessment of the degree of disability (functional deficit) caused by the symptoms (e.g., ESS)
- Preliminary evaluation of the cause of the symptoms
- Support and management of conservative therapies, e.g., weight control and life style changes, if appropriate

Information needed for non-emergency referral to specialised health care and referral indications

A requirement for referral is that at least two of the symptoms bulleted below apply: daytime fatigue, falling asleep inappropriately, high-volume snoring for a prolonged time, breathings stops observed by another person, morning headache, recurrent awakening at night in a feeling of suffocation, memory defect or change of affects possibly related to sleep apnoea, suspicion of obesity-related ventilation deficit.

The referral must include information on symptoms, otorhinolaryngological condition, profession, body mass index, ESS score, smoking habits, thyroid function, and assessment of the metabolic syndrome in overweight patientst.

Specialised hospital care

Primarily treated by weight control and continuous positive airway pressure (CPAP) (cf. Pulmonary diseases). The indication for surgery is always based on evaluations case by case. The indication for surgery is always based on evaluations case by case. Before surgery on the pharynx is anticipated, the reason and level of snoring must be clarified and any other causes for upper airway obstruction must be eliminated and treated (e.g., retrognathia, nasal congestion)

A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of the patient's body mass index, co-existing diseases and other factors, would not benefit from the operation.

- Mild sleep apnoea (AH 5 – 15), if conservative therapies have not benefitted the patient and the patient ha unequivocal symptoms (e.g., ERSS > 10)
- Moderate and severe sleep apnoea (AHI > 16, ESS > 10); if conservative therapies have not benefitted the patient or non-surgical treatment is inappropriate
- Severe. Socially incapacitating snoring (snoring every night and in all sleeping positions) together with associated daytime fatigue symptoms (ESS > 10)

- The level of snoring and the cause for snoring have been elucidated and all other reasons for upper airway obstruction have been excluded or treated (e.g., jaws more retropositioned than usual, nasal congestion)
- Child snores every night; snoring associated with hyperplasia of adenoids/tonsils and/or episodes of apnoea because of snoring.

Current care guidelines (sleep apnoea)

Under preparation.

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SURGERY OF RECURRENT OR CHRONIC OTITIS MEDIA IN CHILDREN

ICD disease classification

- H65 Otitis media non purulenta (nonsuppurative otitis media, w.g., serous otitis media and glue ear)
- H66.0 Otitis media suppurativa acuta (suppurative acute otitis media)

Primary health care/Information needed for non-emergency referral

- Information about previous middle ear infections and upper respiratory tract infections and of hearing impairment, if any
- Information about the risk factors predisposing for recurrent middle ear infections and general diseases, if any

Criteria for non-emergency surgical treatment within specialised health care

The indication for surgery is always based on evaluations case by case. A requirement for non-emergency surgical treatment is that at either one of the two circumstances bulleted below apply (the assessment relies usually on the patient's history and the information in the referral) If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation or if the risks of surgery outweigh the expected benefit.

- Physician-diagnosed acute otitis media more than 3 times in a time period of 6 months or more than 4 times in a period of 12 months based, for example, on the following criteria: Symptoms of respiratory tract infection and 1) poor movement of the tympanic membrane, 2) tympanogram type B, 3) impaired hearing or 4) secretion in connection with tympanocentesis, if performed
- Despite treatment, there is fluid in the middle ear for at least 2 months uninterruptedly, which has been assessed, for example, as follows: 1) Poor movement of the tympanic membrane, 2) tympanogram type B, 3) impaired hearing, 4) secretion in connection with tympanocentesis, if performed.

Current care guidelines (acute otitis media)

www.kaypahoito.fi

Working group:

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CHRONIC OTITIS MEDIA OR ITS SEQUELAE

ICD disease classification

- H70.1 Mastoiditis chronica (chronic mastoiditis)
- H71 Cholesteatoma auris mediae (cholesteatoma of middle ear)
- H72 Perforatio membranae tympanicae
(perforation of tympanic membrane)
- H95 Morbositates auris et processus mastoidei post interventiones
(postprocedural disorders of ear and mastoid process)

Criteria for non-emergency surgical treatment within specialised health care

The indications for surgery are always based on an individual assessment of the patient by an ENT-specialist physician who is familiar with the topic. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Cholesteatoma
- Perforation of the tympanic membrane that has not closed spontaneously or by an open care procedure (e.g., covering the perforation with a piece of paper or fat)
- Recurrent or prolonged suppuration from the middle ear and mastoiditis that have not been cured with conservative, i.e., non-surgical, measures
- Conductive hearing loss as a possible consequence of the infection (cf. surgery to improve hearing)

Current care guidelines:

None

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THE NOSE DUE TO INJURY, INFECTIONS OR SEQUELAE AFTER TUMOUR SURGERY OR CONGENITAL MALFORMATIONS

ICD disease classification

M95.0 Acquired deformity of nose

Q30 Congenital malformations of nose

Primary health care/Information needed for non-emergency referral

Pathology of the nose that causes a significant cosmetic disability to the facial appearance of the patient.

Criteria for non-emergency surgical treatment within specialised health care

The indications for surgery are always based on an individual assessment of the patient by an ENT-specialist physician who is familiar with the topic. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Significant cosmetic disability of the facial appearance of the patient (e.g., saddle nose, malposition of the nasal bone due to scarring or ossification) which is often combined with a functional disability. Abnormal appearance of the osseous or cartilaginous part of the nasal pyramid 1) after fracture (e.g., traffic accident, fall or assault), or 2) postinfection sequelae (e.g., abscess of the nasal septum, Wegener's granulomatosis)
- Malpositioning of the nose related to cleft palate or other congenital malformation
Sequelae after surgical removal of benign or malignant nasal tumour
- Measurement of the horizontal area of the nasal passages and/or of air flow (acoustic rhinometry and/or rhinomanometry) is recommended, if the patient also experiences a functional disability

Current care guidelines:

None

See also

stuffy nose

Working group:

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POOR HEARING

ICD disease classification

- H90.0 Hypacusis conductiva bilateralis (conductive hearing loss, bilateral)
- H90.1 Hypacusis conductiva unilateralis (conductive hearing loss, unilateral with unrestricted hearing on the other side)
- H80 Otosclerosis
- H72 Perforatio membranae tympanicae (perforation of tympanic membrane)
- H74.2 Discontinuitas ossiculorum auditoriorum (discontinuity and/or dislocation of ear ossicles)
- H74.3 Aliae abnormitates acquisitae ossiculorum auditoriorum (other acquired abnormalities of ear ossicles)

Primary health care/Information needed for non-emergency referral

- Patient has significant conductive hearing loss

Criteria for non-emergency surgical treatment within specialised health care

The indications for surgery are always based on an individual assessment of the patient by an ENT-specialist physician who is familiar with the topic. A requirement for non-emergency surgical treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from surgery, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the operation.

- Air conduction threshold value 30 dB PTA (0.5, 1, 2 kHz mean) or poorer, conduction deficit is at least 15 dB and the Rinne test is negative. Hearing threshold after treatment is probably 30 dB HL or better, or at most 15 dB poorer than the better ear.
- Suspicion of absence of tympanic membrane.
- Patient prefers surgical treatment over rehabilitation with hearing aid.

Current care guidelines:

None

See also

hearing rehabilitation with hearing aid

Working group:

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HEARING REHABILITATION WITH HEARING AID

ICD disease classification

- H90 Hypacusis conductiva et sensorineuralis
conductive and sensorineural hearing loss)
- H91.1 Presbycusis (age-related hearing loss)

Primary health care/Information needed for non-emergency referral

- The patient's hearing loss impacts on the activities of daily living and the patient has the motivation to use a hearing aid.
- Hearing loss that impairs studying or functioning at work
- Hearing loss that disturbs the everyday communication of the patient related to hearing and speech
- There is a suspicion of a hearing deficit in a child and this disability may impact on the development of the child's speech and language development or interactive skills

Specialised hospital care

Provision of a hearing aid requires the assessment of a specialist physician familiar with hearing rehabilitation with hearing aids (audiologist, ENT-specialist or phoniatrist).

The goal is recovery of binaural hearing (hearing with both ears).

Basis for rehabilitation

- Pure tone audiometry performed in a maximally silent environment (sound-proof chamber); the average (dB HL) of the hearing thresholds covering the frequency range of speech (0.5, 1, 2, 4 kHz) is determined. Under special circumstances the corresponding information is used regarding the ear with poorer hearing. The following approximate limits of hearing may be applied for consideration of a hearing aid: 1) for work, studies or similar functions ≥ 30 dB, 2) for other reasons $\geq 30 - 40$ dB, 3) for speech development and learning in children ≥ 20 dB.
- Established hearing loss in small children using appropriate methods (sound field, otoacoustic emission, brain stem responses)
- Hearing loss that cannot be treated surgically or surgery is not desired.

Current care guidelines:

None

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PREVENTIVE ORAL PRIMARY HEALTH CARE

The primary goal of preventive health care is to prevent dental and oral illness and to uphold good oral health and function. Each visit to an oral health professional has an element of preventive oral health. If the patient's need for preventive oral health exceeds what can be accomplished in connection with regular visits for treatment of oral illness, arrangements for specific visits for preventive oral health should be made.

Preventive primary care in connection with treatment visit

- Information on food and nutrition, guidance in upholding oral health at home, treatment with fluoride or other medicines, removal of dental plaque and calculi

Separate visits for improved preventive care are needed if the patient has:

- High risk of tooth caries and of periodontal diseases: 1) Eruption of the teeth, 2) active incipient caries or caries of the dental neck and poor condition of the periodontal structures of the teeth (deep periodontal pockets and/or increased haemorrhage), 3) reduced salivation
- Impaired capacity to attend to oral hygiene
- Increased risk of oral diseases due to illness or medication

At the population level preventive oral health is carried out in collaboration with many sectors. Preventive oral health care requires collaboration among the personnel of maternal-child health care centres, day time care units, schools, occupational health care, home care, long-term care units, and other parties.

Current care guidelines (Management of caries, Periodontal diseases)
www.kaypahoito.fi

Working group:

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ASSESSMENT OF THE NEED FOR NON-EMERGENCY TREATMENT AND GROUNDS FOR TREATMENT WITHIN PRIMARY HEALTH CARE*

When the patients' treatment needs are assessed, the following are considered: symptoms, symptom duration, other patient-related circumstances related to the condition, general health and history. The degree of urgency will depend upon the need to treat the oral disease and the need to treat other patient-related ailments and this need may vary for the same patient during the same treatment period. Patients with acute pain, severe symptoms, oedema, inflammations and injury are treated either on an emergency or urgently. The need for treatment and the treatment itself of patients who are referred for treatment are always decided on the basis of how urgent the treatment need is.

Within three days: Symptomatic patient

- The patient has unequivocal symptoms which do not require emergency treatment, and the patient agrees.

Within three weeks: Mildly symptomatic patients

- The patient has mild symptoms and complaints which require assessment of the need for treatment and treatment. Usually the patient is referred to a dentist and, if appropriate, to a dental hygienist
- Patients referred for treatment and patient for continued treatment after previous emergency referral

Within three months: Suspicion of disease

- Symptom-free, uninformed patients bothered by some change in their mouth. Referral to a dentist or dental hygienist with immediate access to a dentist's consultation

Within six months:

New patients with no symptoms and booked examinations

- An appointment with a dentist is arranged for new, symptom-free patients with no previous health and sickness information available or whose previous visit was several years (3 -5 years) ago. Based on the treatment plan and work division, the patient may also be referred to a dental hygienist for treatment.
- The previous treatment period concluded with an agreement to make an examination for follow-up purposes. In accordance with a treatment plan designed by a dentist, some of the patients may be attended to by a dental hygienist or dental nurse/assistant

Patients posing a risk for blood-borne infections (hepatitis C, HIV)

- Treatment access is based on treatment urgency and the patient's state of health.

The decision to plan the treatment over a longer span of time is made on the basis of the patient's history, physical examination or the mouth, and diagnosis;

* cf. 1) preventive care, 2) treatment of periodontal disease, 3) prosthetic treatment, 4) orthodontic treatment, and 5) treatment of functional disorders of the temporomandibular joints and the chewing organs

the treatment plan is designed by the dentist in collaboration with the patient based on this information.

Current care guidelines:

None

Working group:

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EARLY TREATMENT OF DENTAL CARIES OF CHILDREN AND ADOLESCENTS BELOW AGE 18 YEARS

Early treatment of dental caries is effective. This refers to treatment that aims at restoring the damaged tooth surface without affecting the enamel. If this is to succeed, the damaged area of the tooth must be kept free from the cariogenic biofilm (bacterial plaque). If a successful treatment result is to be maintained, the patient's oral hygiene and food intake habits must be modified in a way that promotes dental health.

A child's parents / custodians must see to it that the child's mouth is cleansed regularly until the child itself is capable of removing the biofilm from all surfaces of all teeth twice daily with the help of dental paste containing fluoride. A healthy diet and avoidance of snacks are important ways to maintain oral and dental health.

Criteria for early treatment of cariotic damage to the teeth

Treatment to promote the patient's oral health, instructions to the patient for treatment at home and support are based on a physical examination of the mouth, diagnosis and treatment plan or on an individual health check of the mouth and assessment of the treatment need or on assessment of how the patient has responded to given treatment. Due consideration must be made for local practices and conditions; the patient is managed by a treatment team including a dentist, dental hygienist and dental nurse/assistant.

Criteria for early treatment of cariotic damage to the teeth (one or several of the criteria mentioned below):

- incipient active cariotic damage
- recurrent or chronic illness and medication
- bacterial plaque on teeth surfaces which has accumulated over several days
- need for surface treatment of biting surface of teeth 6 and 7

Assessment of the need for non-emergency oral treatment and the basis for this assessment for primary health care have been presented in handbook 2005: 5 of the of the Ministry of Social Affairs and Health.

Current care guidelines (management of caries)

None

Working group:

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NEED FOR ORAL TREATMENT AMONG PERSONS WHO NEED ASSISTANCE

Persons whose capacity to take care of their own oral and dental health is reduced will have access to assessment of their need for oral health care by a professional person. This assessment forms the basis for daily oral care. The treatment assessment shall produce a plan which includes the daily oral care, problems, goals, execution of the plans and treatment guidance. The treatment and service plan shall include a statement on the state of health of the patient's mouth and the time of assessment of the treatment need. If this assessment has not been made, an appointment shall be arranged for the patient as soon as possible for assessment of the need for treatment and the need for referring the patient for dental examinations.

The need for daily oral care is increased among disabled persons who are at high risk of oral diseases due to illness, invalidity and/or medication, e.g.,:

- patients with advanced diabetes, Parkinson's disease or rheumatoid disease, persons with gingival hyperplasia as a results of an adverse effect of medication and patients at risk of aspiration pneumonia,
- patients with Sjögren's syndrome and patients with dry mouth due to radiation therapy or other causes)

A dental hygienist or dental assistant/nurse will guide and instruct personnel, family and patients in matters related to oral cleansing. The personnel responsible for the patient's daily care will see to it that the patients' mouth and dentures, if any, are cleansed daily, unless the patient manages these tasks on his/her own. The daily oral hygiene of patients in home care must also be attended to.

A dental hygienist or dental assistant/nurse will do the following for patients who cannot manage their own daily oral hygiene and require support, help and aids:

- will create appropriate conditions for execution of the tasks needed to maintain good oral hygiene, and clean the dentals surfaces and dentures by visiting the patient at least once in accordance with the service plan
- will guide the patient, family and personnel to identify problems in the patient's oral health and are able to see to it that the patient's oral hygiene is in order and the dentures cleansed
- will see to it that the patient receives the necessary treatment in collaboration with a dentist and other personnel.

The oral treatment service plan based on the dental examination is included in the overall treatment and service plan of the patient.

Criteria for referral to dental examination:

- well-founded suspicion that the reason that the patient is restless loses weight, is in poor general condition, is anorectic, has pains and aches, is confused or has difficulties to swallow or to speak is that the patient has a dry mouth, oral pain (mucous membranes), inflamed teeth or a poor denture.

- inflamed gums and / or cariotic, infected, loose, aching or painful teeth which, when used for chewing, cause pain in the oral mucous membranes
- difficult to use dentures properly
- oral ulcer does not heal in 2 weeks and / or expanding changes of the mucous membranes
- swelling in the area of the mouth or jaws
- disturbing bad breath

Current care guidelines:

None

Working group:

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PERIODONTAL DISEASES WITHIN PRIMARY HEALTH CARE

ICD disease classification

K05	Gingivitis and periodontal diseases
K06.00-K06.01	Gingival recession, local or general
K06.1	Gingival enlargement (hyperplasia)
T84.60-64	Infection and inflammatory reaction due to internal dental fixation device

Periodontal diseases are largely chronic and asymptomatic or only mildly symptomatic, and thus it is important to diagnose these conditions early. Periodontal diseases are to a significant degree preventable and treatable by careful observation of a good oral hygiene.

When the patients' treatment needs are assessed, the following are considered: symptoms, symptom duration, other patient-related circumstances related to the condition, general health and history. Patients with severe symptoms and patients whose health condition requires immediate treatment of the periodontitis are treated urgently. The need for treatment and the treatment itself of patients who are referred for treatment are decided on the basis of how urgent the treatment need is.

Within three days: Patient has marked symptoms

- Patient has pain, swelling or pus formation in the gingival area. Chewing causes dental pain and the tooth is mobile. The gingival areas exhibit painful, ulcerous or vesicular changes.

Within three weeks: The patient is symptomatic or exhibits changed due to the gingival disease

- The patient's gingiva tends to bleed, is red and swollen and the patient has some disease, medication or other condition that require admission for treatment. Markedly increased mobility of teeth or internal dental fixation device. Patient has a history of chronic, symptomatic gingival disease Continued treatment after previous urgent referral

Within six months: suspicion of disease or previously agreed control visit

- The patient has gingival bleeding, the teeth are increasingly more mobile, and the patient has a bad taste in his/her mouth or a problematic bad breath

Assessment of need for treatment

- When the patient has not been assessed previously, a dentist or dental hygienist records 1) the patient's history, 2) plaques and level of oral hygiene, 3) gingival pockets and haemorrhages, and 5) fillings
- A dentist is responsible for the overall treatment plan: makes any additional examinations, establishes the diagnoses, and makes the referrals needed for the work distribution
- Referrals for maintenance treatment to a dental hygienist should cover the entire time treatment is needed (e.g., ½ - 2 years).

Evaluation of the frequency of visits for maintenance treatment

- Treatment is determined on the basis of disease progression and therapy response.
- The patient's medication is taken into consideration as well as any diseases and other factors that may affect the progression of the gingival disease or that may become worse due to the gingival disease.
- Teaching oral hygiene (mouth cleansing) and securing that the conditions at home allow proper oral hygiene are integral parts of patient care.

Current care guidelines

(Gingivitis and periodontal diseases – guideline being prepared)

None

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TREATMENT OF DENTAL AND OTHER TISSUE DEFECTS AND OTHER NON-EMERGENCY PROSTHETIC TREATMENTS WITHIN PRIMARY HEALTH CARE

ICD disease classification

K00	Disorders of tooth development and eruption
K08	Other disorders of teeth and supporting structures
K12.12	Stomatitis caused by denture
Q35 – Q37	Cleft lip and cleft palate
Q 87	Other specified congenital malformation syndromes affecting multiple systems
T 90	Sequelae of injuries of head

When the patients' treatment needs are assessed, the following are considered: symptoms, symptom duration, other patient-related circumstances related to the condition, general health and history. When treatment urgency is assessed, problems related to the use of dentures, e.g., pressure ulcers and mucous membrane abrasions, should be taken into consideration.

Within three days: the patient has symptoms or the denture is broken

- A broken denture causes severe problems or soft tissue damage. An anterior tooth, destroyed by injury, needs temporary replacement

Within three weeks: Broken denture or other prosthetic device

- Denture malfunction causes problems for which the patient needs treatment. Continued treatment after previous urgent referral.

Within six months

- Patient has poorly fitting denture and occlusal problems.

Grounds for prosthetic treatment

- Replacement of congenitally missing teeth either within primary health care or in collaboration with specialised health care
- Replacement of teeth when significant functional and/or social disability is due to one or several lost teeth or to changes in chewing (e.g., severely worn teeth).
- Treatment of dental injury
- Repair of severely injured tooth or teeth as an alternative to continuous reparative measures
- Renewal and maintenance of old denture, especially for elderly patients and patients at institution or for persons who have lost their natural teeth completely
- Complementary dental prosthetic treatment according to plan initiated specialised health care

Current care guidelines:

None

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MALFUNCTION OF THE CHEWING ORGANS AND TEMPOROMANDIBULAR JOINT WITHIN PRIMARY HEALTH CARE

ICD disease classification

- K07.5 Dentofacial (teeth and jaws) functional abnormalities
- K07.6 Temporomandibular joint disorders
- M79.1 Myalgia
- F45.8 Bruxism (teeth grinding))
- S03.0 Dislocation of articular disc of temporomandibular joint

Treatment is indicated if the patient has significant symptoms. Patients with trismus (lockjaw) and other severe symptoms require urgent treatment.

Within three days: Patient has marked symptoms

- Patient experiences painful snapping, pain in the area of the temporomandibular joint and limited movement of the jaw.
- Patient experiences severe pain of chewing muscles, teeth and face and dysaesthesia in facial muscles.

Within three weeks: symptomatic patient with referral

- Patient has referral or needs continued treatment after previous urgent referral. The patient's temporomandibular joint exhibits pathological changes of various degrees; patient with rheumatoid arthritis experiences jaw symptoms

Within six months

- Symptoms from the muscles of mastication, worn teeth or cracked teeth and fillings due to severe bruxism or continuous biting.
- Mild or occasional pain in temporomandibular joints, muscles of mastication, face or teeth.

The prognosis is good for malfunction of the chewing organs, including problems related to the articular disc and arthrosis of the temporomandibular joint. In the absence of treatment response the patient is referred to specialised health care.

Current care guidelines (temporomandibular disorders (TMD))

www.kaypahoito.fi

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ORTHODONTICS WITHIN PRIMARY HEALTH CARE

ICD disease classification

- K00 Disorders of tooth development and eruption
- K01 Embedded and impacted teeth
- K03.5 Ankylosis of teeth
- K07 Dentofacial anomalies [including malocclusion] (e.g., marked differences in size of mandible and maxilla, disproportions of the dental arches and abnormal location or position of teeth)
- K08.1 Loss of teeth due to accident, extraction or local periodontal disease
- Q35-37 Cleft lip and cleft palate

Time of assessment of need for treatment for children and adolescents

- The need for orthodontic intervention is assessed from the deciduous teeth and from the transition to the deciduous and the permanent teeth.
- The optimum time of treatment is assessed individually.

During teeth development

- The severity of malocclusion is assessed on a scale of 10¹. Malocclusion of grade 8 to 10 is prioritised for treatment. Malocclusion of grade 7 is treated, if progression over time is probable.

Mature teeth

- Malocclusion of grade 9 to 10 is prioritised for treatment. Malocclusion of grade 8 is prioritised if the malocclusion causes serious health problems. Other grades of malocclusion are treated, if necessary from the point of view of other dental treatment.

Current care guidelines:

None

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¹ *Grades 10 – 7*

- Grade 10: anomalies related to cleft lip and cleft palate; severe developmental anomalies of the jaws and head region; sequelae after injuries to the mouth region
- Grade 9: Unequivocal functional disability of the bite due to absence of several teeth; bite where upper and lower jaws are markedly maloccluded ; very severe open bite; embedded upper front tooth
- Grade 8: Bite where upper and lower jaws are maloccluded; severe open bite; closed bite; cross bite or scissor bite that causes functional disability; markedly crowded teeth; loss or lack of upper front teeth; sequelae after tooth injuries; embedded teeth; ankylosis (anchorage to jaw bone) of decidual teeth.
- Grade 7: Marked overbite; deep bite which will probably progress; open bite; unequivocally crowded teeth; sparse teeth; abnormalities of teeth; condition where there is a risk of embedding of decidual tooth

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EXTRACTION OF EMBEDDED OR IMPACTED WISDOM TEETH

ICD disease classification

K01 Embedded and impacted teeth

Primary health care

Usually wisdom teeth are extracted surgically within primary health care. Symptom-free wisdom teeth do not usually require extraction.

A requirement for non-emergency treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the treatment. Decisions deviating from the unified criteria must be explained in writing.

Indications for extraction

- Recurrent infections and symptoms from wisdom teeth
- The patient's general health requires management of inflammations and infections and there is an obvious risk of infection of the wisdom teeth
- Teeth as obvious risk of infection
- Pathological changes related to the teeth and periodontal tissues, e.g., cysts, tumours, chronic infection of the adjacent bone, damaged wisdom tooth or adjacent tooth
- As a part of treatment of the area of the mouth and jaws: the tooth stands in the way for, e.g., reparative surgery of the jaws, orthodontic procedures or prosthetic treatment
- The tooth area is painful and there are indications to extract the tooth to elucidate the cause for the pain

Criteria for non-emergency treatment within specialised health care

If extraction of a wisdom tooth is indicated, the treatment should be provided within specialised health care, if one or several of the circumstances bulleted below apply. In the following situations the patient should be treated within specialised health care, at an institution with hospital facilities:

- An infection related to the tooth has led to a severe local or general complication.
- The patient's condition requires treatment in a hospital.
- The operation demands exceptional know-how

Current care guidelines (third molar)

www.kaypahoito.fi

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ABNORMALITIES OF THE FACE AND JAWS

ICD disease classification

K00.0	Anodontia
K07.0	Major anomalies of jaw size
K07.1	Anomalies of jaw-cranial base relationship
K07.2	Anomalies of dental arch relationship
Q35-37	Cleft lip and cleft palate
Q67	Congenital musculoskeletal deformities of head, face, spine and chest
Q87	Other specified congenital malformation syndromes affecting multiple systems
T90	Sequelae of injuries, e.g., conditions after treatment of injuries and tumours

Criteria for non-emergency treatment within specialised health care

A requirement for treatment is that at least two of the circumstances bulleted below apply. If they do apply, it may still be justifiable to refrain from treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the treatment. A requirement for starting treatment is that the general care of the teeth is in order and that the dentition is suitable for orthodontic treatment. Although the surgical treatment may be carried out within the specialised health care sector, orthodontic treatment may also be carried out within primary health care. Decisions deviating from the unified criteria must be explained.

- Severity of malocclusion: 1) deep, traumatic bite, 2) marked open bite, 3) marked lateral disproportion of bite, 4) marked jaw asymmetry, 5) marked retrognathia, 6) marked prognathia
- Other diseases associated with the condition or requiring treatment: Sleep apnoea where disproportion of the jaws contributes to the interruption of breathing during sleep, 2) rheumatic or other diseases that destroy the temporomandibular joints, 3) other diseases that contribute to the bite problem or its treatment
- Disability caused by disproportion of the jaws or bite: Marked functional disability affecting eating, chewing or speaking, 2) pain, 3) other functional disability affecting the patient's social life
- Vast and technically demanding treatments: Vast treatment entities that require multiprofessional collaboration, 2) technically demanding surgery, 3) vast operations (bone transplantations etc.)

Current care guidelines: None

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POOR FUNCTION OF CHEWING ORGANS AND THE TEMPOROMANDIBULAR JOINT

ICD disease classification

- K07.5 Dentofacial (teeth and jaws) functional abnormalities
- K07.6 Temporomandibular joint disorders
- M79.1 Myalgia
- K07.58 Other dentofacial functional abnormalities
- S03.0 Dislocation of interarticular disc of temporomandibular joint

Criteria for non-emergency referral to specialised health care

The regular treatment of abnormal bite physiology is provided by the primary health care sector (cf. malfunction of the chewing organs and temporomandibular joint within primary health care). The treatment is transferred to specialised health care, if appropriate conservative treatment within primary health care has not been successful in approximately 3 months and there is reason to believe that the problem of the patient's bite physiology is significant or if the patient has concomitant diseases or circumstances that require that examinations and treatment are carried out within specialised health care. Urgent referral is needed for trismus (lockjaw).

Criteria for non-emergency treatment within specialised health care

A requirement for treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the treatment. Decisions deviating from the unified criteria must be explained in writing.

- Destructive disease of the temporomandibular joint
- Tissue destruction seen in images of the temporomandibular joint (e.g., due to rheumatoid arthritis or a tumour).
- Sequelae after fracture of temporomandibular joint (e.g., limited opening of mouth)
- Recurrent luxation of temporomandibular joint
- Bite change as a consequence of disease affecting the temporomandibular joint: open bite or deep retrognathia, 2) unilateral open bite
- Severe malfunction of chewing organs in association with: 1) marked restriction of movement of mandible, 2) painful snapping, 3) pain or oedema in temporomandibular joint, 4) facial pain, lingual pain, 5) headache (reasons not associated with bite have been excluded)

Current care guidelines:

None

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GINGIVITIS AND PERIODONTAL DISEASE (INCLUDING DENTAL FIXATION DEVICES OR IMPLANTS)

ICD disease classification

K05	Gingivitis and periodontal diseases
K06.00 –K06.01	Gingival recession, local or general
K06.1	Gingival enlargement (hyperplasia)
T84.6	Infection and inflammatory reaction due to internal dental fixation device
A69.10	Acute necrotising ulcerative gingivitis (ANUG)

Criteria for non-emergency treatment within specialised health care

A requirement for non-emergency treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the treatment. Decisions deviating from the unified criteria must be explained in writing. The patient's general state of health or medication may demand urgent treatment of periodontal disease because, if the periodontal disease were left untreated, this could impact on the treatment results of the patient's other diseases and/or make these diseases worse.

- Difficult-to-treat parodontitis, including severe juvenile parodontitis and rapidly progressive parodontitis
- Severe parodontitis in cases where primary health care has not succeeded in obtaining a sufficient treatment response despite adequate treatment, e.g., if special surgical techniques are needed
- Necrotising ulcerative gingivitis and parodontitis
- Diseases and implant-related infections and inflammations that require multiprofessional collaboration between medical and dental experts
- Vast specialised dental treatment programmes of which periodontal treatment constitutes only a part
- Treatment of periodontal infections in association with the following diseases or illnesses: Malignant tumours of the head and neck region, 2) radiation therapy to the jaws, 3) treatment with cytostatics, 4) before organ transplantations, 5) treatment of gingival hyperplasia caused by medication for prevention of graft-versus-host reactions, 6) in association with immunomodulatory medication, 7) serious blood dyscrasias (e.g., neutropaenia, thrombocytopenia, hemophilia), 8) severe cardiac diseases, 9) poorly controlled diabetes, 10) other disease that requires hospital treatment.
- Severe diseases of the mucous membranes and gingival changes due to other diseases

Current care guidelines: None

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PROSTHETIC TREATMENT OF DENTAL AND OTHER DEFECTS AND OTHER REPARATIVE TREATMENTS

ICD disease classification

- K00 Disorders of tooth development and eruption (e.g., congenital lack of teeth, anodontia, deviations of size and form of teeth)
- K07 Dentofacial anomalies [including malocclusion] (e.g., marked differences in the size of the jaws, anomalies of dental arch relationship and abnormal location or position of teeth)
- K08.0 Exfoliation of teeth due to systemic causes
- K08.1 Loss of teeth due to accident, extraction or local periodontal disease
- K08.2 Atrophy of edentulous alveolar ridge
- Q 16-17 Congenital malformations of ear
- Q35-37 Cleft lip and cleft palate
- Q67 Congenital musculoskeletal deformities of head, face, spine and chest
- Q87 Other specified congenital malformation syndromes involving several organ systems
- T90 Sequelae of injuries, e.g., conditions after treatment of injuries and tumours

Criteria for non-emergency treatment within specialised health care

Planning and execution of treatment of severe dental and tissue defects rely on the collaboration between specialised health care and primary health care and require special know-how and vast multiprofessional expertise. It is usually appropriate that the basic oral care is in order before the patient attends for treatment within specialised health care. If they do apply, it may still be justifiable to refrain from treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the treatment. Decisions deviating from the unified criteria must be explained in writing. The treatment indication may be primarily prosthetic, surgical, orthodontic or implant-related.

Prosthetic treatment is usually reserved for patients with conditions characterised by large areas of tooth loss, by tissue defects in the area of the mouth and jaws or by functional or aesthetic disability.

Implant-related prosthetic treatment refers primary to the following conditions: K00.00, K08.1 in association with the treatment of serious injury, K08.2, T90.

Teeth and tissue defects may be treated prosthetically in the following situations:

- Malignant tumours of the oral and jaw regions
- Benign tumours of the chewing organs, including cysts and similar conditions
- Tissue defects of the eyes, ears and/or other parts of the face
- Facial injuries, jaw injuries
- Destructive disease of the temporomandibular joint
- Congenital dental defects for functional and aesthetic reasons
- Developmental defects affecting the enamel and dentine of several teeth
- Developmental defects of the teeth, conditions causing abnormal tooth form and size
- Malformations and malformation syndromes of the jaws and face

- Advanced jaw atrophy causing severe functional disability and/or pain associated with jaw atrophy despite the use of an appropriate prosthesis.
- Immediate and necessary replacement of teeth in connection with thorough sanitation of the teeth of patients with a general illness

Current care guidelines:

None

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NON-URGENT TREATMENT IN SPECIALISED HEALTH CARE OF INFECTION FOCI OF PATIENTS WITH GENERAL ILLNESS

ICD disease classification

K01	Embedded and impacted teeth
K02	Dental caries
K04.4-04.7	Apical periodontitis (inflammation of tip of tooth root and its surroundings)
K04.8	Root cysts
K04.9	Other and unspecified diseases of pulp and periapical tissues
K09	Cysts of oral region
K05.1	Chronic gingivitis
K05.2-05.6	Periodontitis and pericoronitis (inflammation of the gingiva around the crown of a partially erupted tooth)
K10.2	Inflammatory conditions of jaws

Criteria for non-emergency treatment within specialised health care

Treatment of infection foci refers here in general to surgery (e.g., tooth extraction, plastic operations of the gingiva etc). A requirement for non-emergency treatment is that at least one of the circumstances bulleted below applies. If they do apply, it may still be justifiable to refrain from treatment, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the treatment. Decisions deviating from the unified criteria must be explained in writing.

- Patients queuing for organ transplantation and patients taking medication against the graft-versus-host reaction
- Severe renal diseases
- Patients who have received a curative dose of radiation to a tumour in the operation field
- Serious blood dyscrasias and haemophilias
- Anticoagulation therapy if the anticoagulation level is expected to increase the risk of bleeding (INR > 2.5) or the anticoagulation level is difficult to control.
- Severe congenital and acquired immunodeficiencies
- Serious functional or structural cardiac condition requiring inpatient treatment
- Other serious general disease requiring inpatient treatment

Some of these patients can be treated within the primary health care system the treatment institution is dictated by the severity of the patient's general illness and the magnitude of risk caused by the intervention.

Current care guidelines (Antibiotics for treating oral infections – under preparation): None

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DENTAL TREATMENT UNDER GENERAL ANAESTHESIA OR INTRAVENOUS SEDATION

ICD disease classification

- K01 Embedded and impacted teeth
- K02 Dental caries
- K04.4-04.7 Apical periodontitis (inflammation of tip of tooth root and its surrounding)
- K04.8 Root cysts
- K04.9 Other and unspecified diseases of pulp and periapical tissues
- K05.1 Chronic gingivitis
- K05.2-05.6 Parodontitis and pericoronitis (inflammation of the gingiva around the crown of a partially erupted tooth)
- K09 Cysts of oral region
- K10.2 Inflammatory conditions of jaws

Dental treatment is provided under general anaesthesia or intravenous sedation within specialised health care or under the supervision of an anaesthesiologist for patients who are unable to have dental care within the primary health care sector due to, e.g., functional/intellectual disability, a neurological disease, some other severe general illness or an established severe mental illness. It is also appropriate to provide dental care within the specialised health care sector under general anaesthesia for small-sized children and patients with sleep apnoea. Decisions deviating from the unified criteria must be explained in writing.

Current care guidelines:

None

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ANXIETY DISORDERS

ICD disease classification

F40 - 48 Neurotic, stress-related and somatoform disorders (DSM-IV)

Examples:

- F40.1 Social phobias (Phobia socialis)
- F40.2 Specific (isolated) phobias (Phobiae specificae)
- F41.0 Panic disorder [episodic paroxysmal anxiety] (Status panicus)
- F41.1 Generalized anxiety disorder (Status anxifer)

Primary health care (managed by general practitioner)

- The regular treatment of patient with anxiety disorders takes place within primary health care.

Primary health care supported by psychiatrist's consultations¹

- If regular therapy (pharmacotherapy and/or discussion therapy) has not clearly alleviated the patient's anxiety within one month, a psychiatrist should be consulted.
- If the treatment provided after the consultation has not brought about adequate improvement within 3 months, the patients may be referred for evaluation within specialised health care.

Information needed for non-emergency referral to specialised health care and referral indications²

- Indications for urgent referral are excluded (e.g., serious self-destructiveness)
- The patient's anxiety has not settled after 3 months of treatment conducted on the basis of a psychiatrist's consultations. The patient is referred for evaluation to specialised psychiatric care, if this cannot be carried out within primary health care.
- The patient has concomitantly a chronic anxiety disorder and a personality disorder.
- The patient has been work-incapacitated for 3 months or, at most, for 6 months.
- It is prudent to consider assessment of the patient within specialised health care, if the patient's anxiety impacts on his/her work, functioning and social relations (GAS < 55).

Current care guidelines:

None (consensus statement on panic disorder, November 8, 2000)

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¹ Psychiatrist's consultation refers not only to traditional consultations but also to video conferences or written consultations where a psychiatrist evaluates the patient in collaboration with the treating physician. If psychiatrist's consultations are not available, the patient is referred to specialised health care.

² Specialised (psychiatric) health care refers to patient care led by a specialist physician in psychiatry, regardless of the owner of the care-providing unit. Thus, the mental health care unit of a health care centre may represent primary health care or specialised health care.

DEPRESSION AND BIPOLAR DISORDER

ICD disease classification

- F30 Mania
- F31 Bipolar affective disorder (Psychosis bipolaris)
- F32 Depression
- F33 Recurrent depressive disorder (Depressio recurrens)
- F34 Persistent mood [affective] disorders

Primary health care (managed by general practitioner)

- Mild and moderate depression may be treated without consulting a psychiatrist, if treatment is effective and the patient is work-incapacitated for no more than 3 months

Primary health care supported by psychiatrist's consultations¹

- If usual treatment (two different medicines or treatment modalities) has not had effect within 3 months (in case of the first identified depressive episode the time is 6 weeks), i.e., the patient's symptoms have not clearly abated and/or his/her working ability has not returned, treatment may be continued within primary health care under the support of a psychiatrist's consultation for at most 6 months
- A psychiatrist is consulted regarding pregnant and lactating patients and patient who respond poorly to treatment.
- Symptom-free or mildly symptomatic maintenance phase of bipolar disorder (follow-up)
- Initiation of chronic maintenance treatment with antidepressive medication for a patient whose depression has been exclusively treated within primary health care and who is currently experience his/her 3rd lifetime episode of depression.

Information needed for non-emergency referral to specialised health care and referral indications²

- Indications for urgent referral for treatment within specialised health care must be excluded, e.g., psychotic depression, severe self-destructiveness or inability to take of oneself.
- Patients with severe (cf. ICD-10) depression.
- Depression resistant to pharmacotherapy, defined as patients who have not benefited from two consecutive attempts to treat the depression with antidepressive drugs
- Working capacity /functioning has not returned after 3 6- months of treatment carried out by primary health care with the support of a psychiatrist's consultations, or the patients level of functioning or poor (GAS < 55).
- Suspicion of bipolar disorder. The bipolar disorder need to be assessed and – at least as concerns acute phases – treated within specialised care.

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- Severely and in many respects disturbed patients, especially those with personality disorders

Follow-up

- Maintenance drug treatment and the continuation of this treatment (initiated within psychiatric specialised health care) may be transferred to primary health care once the patient has been symptom-free for at least 6 months with regard to depression or bipolar disorder, or at appoint in time when appropriate treatment has been effectuated, the follow-up is in order and follows treatment guidelines and recommendations, and the patient's condition is sufficiently stable.

Current care guidelines (depression, bipolar affective disorder)

www.kaypahoito.fi

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NEUROPSYCHIATRIC TREATMENT

ICD disease classification

- F04-09 E Organic or symptomatic (e.g., organic psychoses)
(e.g., organic psychoses)
- F80-89, F90, F95, F98.8 Developmental disorders from early childhood on
(e.g., Syndroma Asperger, Syndroma Gilles de la
Tourette and the Attention-deficit hyperactivity
disorder)

Primary health care

- Screening for disorders and treatment according to plan and follow-up which has been agreed upon
- Decisions on work-incapacity for a short period of time (1 – 2 months)

Primary health care supported by psychiatrist's consultations¹

- Diagnostics and treatment of patients who are not severely affected
- Decisions regarding work-incapacity for up to 3 months
- Psychological testing (personality analysis and examination of cognitive capacity)

Information needed for non-emergency referral to specialised health care and referral indications²

- Basic neuropsychological tests.
- Diagnostics, treatment and consultations of difficult-to-treat patients with several problems.
- Patients who require examinations in a ward.
- Diagnostics, treatment, consultations, evaluations of working capacity, and neuropsychological specialist examinations of neuropsychiatric patients who need special know-how and have multifaceted problems.
- It is prudent to consider assessment of the patient within specialised health care, if the patient's symptoms clearly impacts on his/her work, functioning and social relations (GAS < 55).

Current care guidelines:

None

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PERSONALITY DISORDERS

ICD disease classification

- F60.1 Schizoid personality disorder
- F60.0 Paranoid personality disorder
- F60.2 Dissocial personality disorder
- F60.3 Emotionally unstable personality disorder
- F60.4 Histrionic personality disorder
- F60.5 Anankastic personality disorder
- F60.6 Anxious [avoidant] personality disorder
- F60.7 Dependent personality disorder
- F60.8 Other specified personality disorders
- F61 Mixed and other personality disorders
- F62 Enduring personality changes, not attributable to brain damage and disease

Primary health care (managed by general practitioner)

- Screening for personality disorders^a

Primary health care supported by psychiatrist's consultations¹

- If there are problems related to the relationships between the patient and health care professionals, psychiatric consultations may reveal background personality disorders which can provide useful information for supporting these patients also within primary health care.

Information needed for non-emergency referral to specialised health care and referral indications²

- Indications for need of urgent treatment are excluded, e.g., suicidality or psychosis.
- Specialist diagnostics, assessment of need for therapy and execution of therapy for personality disorders
- Usually, patients attend for treatment of some other mental health problem, e.g., depression, anxiety disorder or substance abuse. The unified criteria established for these disorders are applied regarding referral to specialised health care.
- If a suspicion of a personality disorder arises when some other mental disorder is managed, the diagnosis of the personality disorder may be established only after marked alleviation of the symptoms of the patient's other mental disorder.
- If a personality disorder is established, it may need therapy, if it poses a threat to the patient's functioning, capacity to work or capacity to study (GAS < 55)

Current care guidelines (borderline personality disorder): www.kaypahoito.fi

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TREATMENT WITHIN OLD AGE PSYCHIATRY

ICD disease classification

All mental disorders

Primary health care

- Examinations and treatment are provided according to the same criteria as for working-aged patients.

Primary health care supported by psychiatrist's consultations¹

- Preliminary differential diagnostics between organic and functional conditions

Information needed for non-emergency referral to specialised health care and referral indications²

- Examinations and treatment are provided for old patients according to the same criteria as for working-aged patients, i.e., treatment access is based on the medical condition, not on the patient's age.
- Significant somatic disease in addition to the mental illness.
- Problems of differential diagnostics, simplifying complicated medication schemes and examinations requiring collaboration between many specialties.

Current care guidelines:

None

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PSYCHOSES

ICD disease classification

F20 Schizophrenia

F21 Schizotypal disorder

F22 – 29 These diagnoses may also be applied for assessment of other psychotic conditions, e.g., induced delusional disorder (perturbatio paranoides inducta, F24) and hallucinatory psychosis (psychosis hallucinatoria, F28)

Primary health care (managed by general practitioner)

- Screening and referral to specialised health care of patients with prodromes of schizophrenia
- Treatment of patients assessed in specialised health care according to plans designed and updated regularly in collaboration between primary health care and specialised health care
- Supported living, guided daytime activities and work, and vocational/professional rehabilitation in collaboration with the specialised health social care, social services and other actors
- Supportive, long and, if necessary, tight supportive therapeutic relations and treatment of organic diseases.

Primary health care supported by psychiatrist's consultations¹

- Treatment supported by consultation and crisis service and work guidance.

Information needed for non-emergency referral to specialised health care and referral indications²

- Diseases requiring urgent referral are excluded, e.g., acute psychosis, suicidality and severe functional incapacity
- Patients, especially young patients, with prodromes and in whose family history psychoses are common
- Interval treatment periods planned individually and executed at psychiatric wards and other psychotherapeutic and rehabilitative special efforts.
- Tightly controlled open care, family interventions and home visits.
- Extremely difficult-to-treat and dangerous patients in special units

Current care guidelines (schizophrenia): www.kaypahoito.fi

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SUBSTANCE ABUSE

ICD disease classification

ICD F10-19.9 Mental and behavioural disorders and organic brain syndromes due to use of drugs and psychoactive substances (e.g., alcohol, narcotics and sedatives)

Primary health care (A-clinics, occupational health, health care centres, health services for prison convicts)

- Consumers of excessive volumes of alcohol, alcohol dependence, detoxification
- Treatment of drug dependence within the primary health care system
- Uncomplicated dependence on narcotic drugs
- Initiation and execution of opioid replacement therapy with the help of a trained team
- Families with substance abuse problems in collaboration with the social services.

Primary health care supported by psychiatrist's consultations¹

- Pregnant women

Information needed for non-emergency referral to specialised health care and referral indications

- Indications for urgent psychiatric care must be excluded
- Planning and initiation of replacement therapy for opioid addicts until the primary health care can produce these services independently and with sufficient resources
- Difficult withdrawal therapies, e.g., institutional drug withdrawal for abusers of opioids, amphetamine, mixed drug users and severe alcohol dependence (specialised health care or institution for substance abusers)
- Families with drug abuse problems complicated by psychiatric add-on problems
- Initial assessment and planning of the treatment chain of substance abusers requiring special know-how
- Demanding assessments of the working capacity of substance abusers
- Patients with serious double diagnoses, e.g., psychosis and heavy substance abuse, or serious personality disorder and chaotic abuse of narcotic drugs
- Patients with triple diagnoses, in addition, e.g., HIV, and whose management requires multiprofessional collaboration among medical professionals

Current care guidelines (treatment of substance abusers, treatment of alcohol abuse): www.kaypahoito.fi

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EATING DISORDERS

ICD disease classification

F50 E.g., Anorexia nervosa, bulimia nervosa

Primary health care (managed by general practitioner)

- Identification of condition

Primary health care supported by psychiatrist's consultations¹

- Mild anorexia or bulimia:
 - 1) Symptoms of eating disorder for longer than 3 months psychiatric consultation should be considered
 - 2) even mild eating disorder for longer than 6 months: consultation with a psychiatrist should be arranged

Indications for non-urgent referral to specialised health care²

- Indications for urgent psychiatric care must be excluded
- Patients with anorexia or bulimia whose mental and/or somatic condition does not require immediate treatment.
- Chronic eating disorders with treatment attempts and/or the patient might not be committed to treatment.

Current care guidelines (eating disorders in children and adolescents)

www.kaypahoito.fi

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IMPACT OF MENTAL DISEASES ON CAPACITY TO WORK

ICD disease classification

All mental disorders. Further instructions are recorded in the disease-specific criteria

PePrimary health care (managed by general practitioner)

- In the mental disorder has caused work-incapacity for more than one month, a psychiatrist should be consulted.

Primary health care supported by psychiatrist's consultations¹

- Work-incapacity for 2-3 months because of mental disorder.

Information needed for non-emergency referral to specialised health care and referral indications²

- Work-incapacity for 3-6- months because of mental disorder.

Current care guidelines:

None

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SPECIALISED HEALTH CARE ON THE BASIS OF SYMPTOMS AND FUNCTIONAL CAPACITY OF YOUNG PEOPLE AGED 13 – 22 YEARS REGARDLESS OF DIAGNOSIS

Functions within primary health care

- Identification of the disorders and execution of the continued therapy in accordance with the instructions provided by the specialised health care
- Almost all diagnostic procedures are made within the specialised health care.

Criteria for non-emergency treatment within specialised health care

The assessment form is filled in by actors within the specialised health care system. The criteria may also be used for referral. The criteria for treatment within specialised health care are a diagnosis of a mental disorder and a score of more than 50.

Symptoms and risks (evaluate each item like this: no, slight, moderate, severe symptoms or risks)

25 points: At least one of the following symptoms or risks is severe or moderate:

- Poses a danger to oneself
- Poses a danger to others
- Has psychotic symptoms
- Developmental delay or risk of developmental delay in relation to the person's age
- Introverted symptoms (e.g., depression or anxiety)
- Extroverted or destructive conduct (e.g., cruelty to animals, lighting of fires, or aggressive or defiant conduct)

Impaired functional capacity (evaluate each item like this: no, slight, moderate or severe impairment)

25 points: At least one of the listed domains of functionality is impaired or the problem is moderate or severe (or the CGAS-value is 41 – 50 or < 40):

- Problems with school work
- Impaired functionality of social interaction and relations with friends.
- Problems at home
- CGAS* assessment (no impairment > 60, slight impairment 51-60, moderate impairment 41-50, severe impairment <40).

Other crucial risk factors (evaluate each item like this: no, slight, moderate or severe problem)

10 points: At least one of the listed risk factors is severe:

- Family has problems in supporting the young person
- Concurrent somatic diseases
- Concurrent mental illnesses
- Substance abuse

Prognosis if specialised psychiatric care is not provided (good, moderate, problematic, poor)

40 points: Poor

25 points: Problematic

Current care guidelines:

None

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GROUNDS FOR NON-EMERGENCY SPECIALISED HEALTH CARE IN CHILD PSYCHIATRY

ICD disease classification

All illnesses and disorders in the field of child psychiatry

For evaluation of the need for treatment, the child's symptoms, functional capacity, developmental progress and the whole situation of the child and family are taken into consideration. Assessment forms based on unified criteria for the need of therapy are available for children aged 0 – 4 years and 5 – 15 years. The forms have been developed by the Western Canada Waiting List Project (Journal of the American Academy of Child and Adolescent Psychiatry 2002;41: 367-76). Consideration is taken of the child's symptoms, functional capacity, developmental progress and the whole situation of the child and family, when the need for therapy is evaluated.

Primary health care

- The task is to identify the mental disorders, to perform examinations and treatment on the primary health care level and to execute the continued treatment in accordance with the instructions provided by the specialised health care.
- Almost all diagnostic procedures are made within the specialised health care.
- Primary health care should exploit the possibility to consult specialists in the field of child psychiatry and multiprofessional working groups which cross various organisational levels.
- A part of the work to preserve the mental health of children and some of the work of the specialised health care sector are carried out within the social services (family centres).

Information required in non-emergency referral

- Symptoms of the child and symptom history (start, duration and course)
- Functional level of the child (day care, school, social relations)
- Growth and development of the child
- The entire situation of the child and the family, parental competence
- Assessments and treatment executed within primary health care

Criteria for non-emergency treatment within specialised health care

([hyperlink to form](#))

- The assessment form is used within specialised health care after the need for treatment has been established to determine the level of appropriate treatment (primary health care or specialised health care).
- A basis for referral to specialised health care is score limit of 12 points (12/42 points).
- Often, however, child psychiatric treatment must be carried out within specialised health care, regardless of the core, because treatment is otherwise not available. In this case, the treatment decision should be documented in the patient files.

The assessment form may also be used if referral is being considered and as a diagnostic tool to identify child psychiatric disturbances. This assessment

form has been further developed into a form that can be used within primary health care, the LASP-form, which may be used in child health centres and within the school health care system to determine the mental development and health of the child, and to assess the need for referral. The LAPS-form is in the process of being tested.

Current care guidelines (Investigation of sexual abuse of a child, eating disorders in children and adolescents)

www.kaypahoito.fi

On the next page the assessment criteria used in the forms are recorded; they are used for assessing the need for non-emergency referral of patients to specialised child psychiatric care.

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CRITERIA FOR TREATMENT OF CHILDREN AGED 5 – 15 YEARS

The basis for referral to specialised health care is score limit of 12 points.

- Does the child exhibit psychotic symptoms or is the child dangerous to him self or others?
 - 0 points No psychotic symptoms, no danger to self, no danger to others
 - 2 points No psychotic symptoms, BUT mild danger to self OR/AND mild danger to others
 - 12 points Mild, moderate or serious psychotic symptoms OR/AND moderate or serious danger to self OR/AND moderate or serious danger to other
- Introverted symptoms
 - 0 points None
 - 1 points Slight
 - 2 points Moderate
 - 3 points Serious
- Extroverted or destructive behaviour
 - 0 points No problems
 - 1 points Slight problems
 - 2 points Moderate problems
 - 3 points Serious problems
- Level of development in relation to age
 - 0 points No retardation nor risk of retardation
 - 1 points Slight retardation or risk of retardation
 - 2 points Moderate retardation
 - 3 points Serious retardation
- Does the child have problems in his home environment
- School / day care
- Functionality in social relations / relations with friends

The problems in each of the areas above are assessed separately on the following scale:

- 0 points No problems
- 1 points Slight problems
- 2 points Moderate problems
- 3 points Serious problems
- CGAS-assessment (Children's Global Assessment Scale)
 - 0 points above 60 points
 - 2 points 41–60 points
 - 3 points 40 points or less
- Family functionality or family-related factors that influence the child
 - 0 points No problems
 - 1 points Slight problems
 - 2 points Moderate problems
 - 3 points Serious problems

- Have there been serious mental disorders in the child's family
 - 0 points Not known / no
 - 1 points Yes, in the close family
 - 2 points Yes, among the child's siblings
 - 3 points Yes, in the parents
- Substance abuse
 - 0 points Not known / no problems
 - 2 points Parents have problems
 - 3 points The child / adolescent has problems

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REFERRAL ON THE BASIS OF SYMPTOMS

Symptom (ICD-classification)

- R52 Neurological pain
- R20 Sensory disturbance
- R51.80 Headache
- R56.8 Other and unspecified convulsions
- R25 Abnormal involuntary movements
 - Muscular weakness or paralysis (e.g., G51, G81-83, H49, R29.8)
- R41
 - Other symptoms and signs involving cognitive functions and awareness (patients past working age are also managed by geriatrists or in collaboration with primary health care)
- R42 CNS-related dizziness and giddiness

Information required in non-emergency referral

- Characterisation, onset or course of symptom or symptoms
- Neurological physical findings
- Results of examinations
- Treatment provided and an evaluation of the impact of the symptom on the patient's capacity to work and to function

Indications for referral to specialised health care (pisteytys 0-100)

Treatment is considered when the score exceeds 50. The indication for consultation is always based on an individual evaluation. Even in cases where the score is sufficient, it may still be justifiable to refrain from consultation, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the consultation. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- Impaired capacity to function (capacity to work, domestic chores, functioning outside the home, hobbies and social interaction)
 - 0 points Not impaired
 - 10 points Mild
 - 30 points Moderate
 - 50 points Marked
- Neurological findings compatible with the symptom
 - 0 points Not observed
 - 50 points Observed
- Symptom progression
 - 0 points No progression
 - 30 points Progressive

- Likelihood that the symptom is associated with an illness that can be diagnosed or treated within specialised health care (cf. chronic neurological diseases that are treated within specialised health care)
 - 0 points Not likely
 - 10 points Slight likelihood
 - 30 points Moderate likelihood
 - 50 points Big likelihood

Current care guidelines (migraine)

www.kaypahoito.fi

Working group

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DISEASE-SPECIFIC INDICATIONS FOR TREATMENT ACCESS

- The indication for treatment of a neurological condition within specialised health care is present, if the referral states which neurological disease the patient has, provided that the disease has been diagnosed reliably and that the disease is such that it should be managed within the specialised health care system.
- The disease is considered as being reliably diagnosed, when the diagnosis is based on typical physical findings, which, if appropriate, may be completed with findings of medical imaging, clinical neurophysiology or laboratory examinations.
- The visits to the unit within the specialised health care system required to manage the patient's treatment are determined individually, as is the duration of the treatment within specialised health care.

Chronic neurological disease (ICD-classification number) which should be managed within the specialised health care system:

- G12 Spinal muscular atrophy (amyotrophic lateral sclerosis) and related syndromes
- G 40 Epilepsy: 1) treatment initiation and discontinuation, 2) pregnancy planning and follow-up during pregnancy, 3) difficult-to-treat epilepsy, i.e., convulsions despite therapy
- G43, G44 Severe or complicated migraine, other headache syndromes (cluster headache and trigeminus neuralgia): irresponsive to regular treatment
- G35 Multiple sclerosis: 1) treatment initiation, 2) assessment of treatment during exacerbations, 3) planning of treatment of serious symptoms (bladder disturbances, pain, fatigue), 4) immunomodulatory and immunosuppressive treatment
- G20 Parkinson's disease: initiation of treatment, complications
- G70 Myasthenia gravis and other myoneural disorders, G73 Disorders of myoneural junction and muscle in diseases classified elsewhere
- G61 Inflammatory polyneuropathy and other immune-mediated neurological diseases
- G62, G63 Other polyneuropathies: severe, progressive
- G71, G 72 Primary disorders of muscles, muscle dystrophies and myopathies: severe, progressive
- G21 – G26 Extrapyrarnidal and movement disorders (others than Parkinson's disease)
- G11 Hereditary and sporadic forms of ataxia
- F00 – F03 Dementia early onset, due to rare causes or atypical
- G47 Narcolepsy and other neurological sleep disorders
- Treatment of brain tumours, unless treated by neurosurgeons or oncologists
- Vascular diseases of the brain: complicated, caused by rare diseases
- Severe neuropathic pain, unless managed by a unit specialised in pain
- Assessment and follow-up of sequelae of brain injury until the patient's working ability has been decided

- Neurological occupational diseases
- Rare neurological diseases
- Vocational or multidisciplinary professional rehabilitation, as required

Current care guidelines (migraine, diagnosis and pharmacotherapy of multiple sclerosis, adult brain injuries, cerebral infarction (stroke), Parkinson's disease, prolonged epileptic seizure, adult epilepsies)

www.kaypahoito.fi

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CRITERIA FOR TREATMENT WITHIN SPECIALISED HEALTH CARE

ICD disease classification

Disease-specific indications for treatment access

Immunomodulatory treatment of multiple sclerosis

- Diagnosis according to the updated McDonald criteria¹
- At least 2 exacerbations of neurological function impairment within the past 2 years or
- One with certainty documented episode of symptoms of neurological functional impairment and at least one new change in MRI compatible with MS-disease that is temporally and neuroanatomically separate from the episode of symptoms
- The patient's functional capacity on the Expanded Disability Status Scale (EDSS) should be 6.5 or less, i.e., the patient is capable of walking at least approximately 20 metres without interruption with the help of appropriate aids (cf. Current care guidelines).²

Immunomodulatory treatment in immune-mediated neurological diseases

- When treatment allows the patient to function better or to have a better quality of life

Treatment of dystonia and local spasticity with botulinum

- When treatment allows the patient to function better or to have a better quality of life, or to facilitate the treatability of the patient

Assessment of treatment of widespread spasticity with baclofen administered intrathecally

- When treatment probably will allow the patient to function better or to have a better quality of life, or to facilitate the treatability of the patient

Current care guidelines (diagnosis and pharmacotherapy of multiple sclerosis)

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¹ McDonald WI, Compston A, Edan G et al. Recommended diagnostic criteria for multiple sclerosis: guidelines from the International Panel on the diagnosis of multiple sclerosis. *Ann Neurol* 2001;50:121-7. Polman CH, Reingold SC, Edan G, et al. Diagnostic Criteria for Multiple Sclerosis: 2005 Revisions to the "McDonald Criteria". *Ann Neurol* 2005;58:840-6

² Kurtzke J. Rating neurologic impairment in multiple sclerosis: An expanded disability scale (EDSS). *Neurology* 1983;33:1444-1452

CPAP-TREATMENT OF OBSTRUCTIVE SLEEP APNOEA

Surgery: Cf. Ear, nose and throat diseases

ICD disease classification

G47.3 Apnoea intrasomnalis obstructiva (obstructive sleep apnoea)

R06.5 Respiratio peroralis (snoring)

Primary care

- Identification of condition
- Support the patient's weight control and lifestyle changes

Information needed for non-emergency referral to specialised care and referral indications

A requirement for referral is that at least two of the symptoms bulleted below apply: daytime fatigue, falling asleep inappropriately, high-volume snoring for a prolonged time, breathings stops observed by another person, morning headache, recurrent awakening at night in a feeling of suffocation, memory defect or change of affects possibly related to sleep apnoea, suspicion of obesity-related ventilation deficit.

The referral must include information on the patient's profession, body mass index, smoking habits, thyroid function, and assessment of the metabolic syndrome in overweight patients.

Specialised hospital care

Primarily treated by weight control and continuous positive airway pressure (CPAP). The indication for surgery is always based on individual evaluations (cf. Ear, nose and throat diseases).

Patients with mild symptoms and a weight index of more than 30 kg/m², symptom perseverance and the impact of weight reduction may be evaluated during a follow-up period of 3 months, unless coexisting illnesses or other circumstances dictate a need for more rapid intervention. Assessment of the severity of obstructive sleep apnoea is primarily based on the functional disability which not always correlated with the index based classification system (mild sleep apnoea AHI 5 – 15 and the Epworth Sleepiness Scale >10; moderately severe and severe AHI >15 and ESS >10).

Test treatment with CPAP-breathing is indicated, if the symptoms significantly limit the patient's physical or mental functionality or quality of life and if polysomnography demonstrates upper airway obstruction. Recurrent episodes of obstructive or mixed apnoea or hypopnoea or 2) severely reduced air flow during inhalation.

Chronic treatment with CPAP-breathing is indicated if a 2-3 month period of CPAP-testing yields the following results: 1) the patient experiences a significant treatment response (regains functionality and quality of life) and 2) the patient uses the CPAP-device for at least 4 hours every day (24 hours).

Follow-up within specialised care

Follow-up of the hourly use of the CPAP-device rests on local agreements.

Current care guidelines: (Adult obesity; Smoking, nicotine addiction and interventions for cessation.)

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ASTHMA OR SUSPICION OF ASTHMA

ICD disease classification

- J45 Asthma bronchiale (asthma)
- R05 Tussis prolongata (prolonged cough)
- R06.0 Dyspnoea
- R06.2 Obstructive breathing
- R94.2 Abnormal results of pulmonary function studies

Primary care

General diagnostics and treatment according to the Current care guidelines

Information needed for non-emergency referral to specialised care and referral indications

Asthma or symptoms compatible with asthma and at least one of the following conditions are met:

- Follow-up with peak expiratory flow (PEF) measurements or the response to bronchodilating drugs are not diagnostic for asthma
- A diagnosis of asthma may be set, but the patient's symptoms or the results of PEF-follow-up measurements or of spirometry do not improve despite treatment for asthma as instructed in the Current care guidelines
- The asthmatic symptoms of pregnant patients are not under control with inhalation glucocorticosteroids.
- There is a need for allergologic examinations, for evaluation of the need for desensibilisation, for examinations with regard to occupational asthma or for evaluation of the patient's working ability within specialised health care.

The referral must include information on the patient's profession, smoking habits, symptoms, degree of symptoms, and use of pulmonary drugs; the PEF-follow-up data, spirometries and chest radiograms must be appended to the referral.

Specialised hospital care

As stated in the Current care guidelines.

Current care guidelines Asthma; Smoking, nicotine addiction and interventions for cessation)

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CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

ICD disease classification

- J44 Chronic obstructive pulmonary disease (COPD)
- R05 Tussis prolongata (prolonged cough))
- R06.0 Dyspnoea
- R06.2 Obstructive breathing
- R94.2 Abnormal results of pulmonary function studies

Primary care

General diagnostics and treatment according to the Current care guidelines

Information needed for non-emergency referral to specialised care and referral indications

Indications according to Current care guidelines.

The referral must include information on the patient's profession, smoking habits, symptoms, degree of symptoms, and use of pulmonary drugs; the PEF-follow-up data, spirometries and chest radiograms must be appended to the referral.

Specialised hospital care

As stated in the Current care guidelines. Non-smoking patients with respiratory failure and chronic hypoxaemia may be treated with an oxygen concentrator at home in accordance with Current care guidelines.

Current care guidelines (Chronic obstructive pulmonary disease (COPD); Smoking, nicotine addiction and interventions for cessation)
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ALLERGIC RHINITIS

ICD disease classification

J30.10 Allergic rhinitis due to pollen

J30.3 Other allergic rhinitis

J30.4 Unspecified allergic rhinitis

Examinations/functions within primary care

- Examination of the nose and sinuses with regard to infections and structural abnormalities, as appropriate
- Seasonal symptoms: basic series of prick testing or measurement of allergen-specific IgE-antibodies to pollens. Skin testing should be centralised regionally to an allergy unit within specialised health care
- Perennial symptoms: basic series of prick testing or measurement of allergen-specific IgE-antibodies to perennial allergens (animal dust, dust mites), as needed
- Symptomatic treatment: Antihistamine by mouth and/or local treatment (glucocorticosteroids, chromones or antihistamines may be used). Rhinitis-associated eye symptoms may be treated locally with eye drops containing chromones or antihistamines.
- Basic examination and treatment of rhinitis-associated asthmatic symptoms, if present, according to the recommendations in the Current care guidelines
- Determination of allergens in the environment of the patient
- Desensitisation on collaboration with specialised health care, if this is possible

Indications for referral to specialised care

- Symptoms not controlled despite use of appropriate medication
- Detailed allergologic examinations are needed
- Detailed examinations with regard to asthma are needed
- Assessment of the need for desensitisation (cf. Current care guidelines: Desensitisation)
- Suspicion of occupational rhinitis: assessment of working capacity and rehabilitation

Examinations/functions within specialised care

- Detailed examinations of the nose and the paranasal sinuses
- Special allergologic examinations
- Detailed examinations and treatment of asthmatic symptoms, if present
- Initiation and execution of desensitization or, if possible, instructions for desensitisation to the primary health care
- Examinations with regard to occupational rhinitis, assessment of working capacity

Current care guidelines (Asthma, Desensitisation): www.kaypahoito.fi

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ATOPIC DERMATITIS

ICD disease classification

L20.0 Eczema atopicum (atopic dermatitis)

Examinations/functions within primary care

- Primary diagnostics mainly based on the patient's history, symptoms and physical findings
- Local treatment with emollient ointments and ointments containing glucocorticosteroid of mild and moderately severe eczema
- Exacerbations (skin infection) are treated with antibiotics
- Follow-up and continued treatment after consultation within specialised health care also in cases of severe eczema

Indications for referral to specialised care

- For suspicion of food allergy in children, see "child with cutaneous and abdominal symptoms (suspicion of food allergy)"
- Difficult-to-treat or widespread eczema (the effect of local treatment is insufficient and the patient requires repeated courses of oral therapy)
- Diagnostic problems, including suspicion of contact allergy
- Significant symptoms of rhinitis or asthma in connection with eczema
- Assessment of working capacity and rehabilitation

Examinations/functions within specialised care

- Planning and execution of treatment of severe atopic eczema to allow the primary health care to take over the follow-up and continued treatment
- Establishment of the diagnosis in atypical cases
- Allergologic examinations, if needed (skin testing, antibody measurement and exposition tests) and examinations with regard to rhinitis and asthma as managed by the respective specialist physicians
- Physician's statements when needed to be issued by specialist physician

Current care guidelines (Food allergy in children)

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PRICK TESTING (CF. ALLERGIC RHINITIS, ATOPIC DERMATITIS, FOOD ALLERGY IN CHILDREN)

Prick testing is used to study the patient's sensitization to allergens in the environment or in the food. Alternatively, the IgE antibody titre in the serum against specific allergens may be measured. The one who performs prick testing must have sufficient expertise in allergen products, an ability to read the test results and a capability to treat any general allergic reactions. To safeguard sufficient knowhow, quality and safety, prick testing should be concentrated to units that perform these tests weekly. Testing is supervised by a physician who is well experienced in allergy testing. Prick testing is associated with a small risk of anaphylaxis.

The purpose of prick testing is:

- to elucidate the patient's tendency for immediate hypersensitivity reactions (atopy)
- to give indications which allergens could be of significance with regard to respiratory symptoms (rhinitis, asthma), conjunctival symptoms, food allergy and cutaneous symptoms

Examinations/functions within primary care

Primary health care performs or commissions the basic prick test series (e.g., the most important respiratory allergens: birch, Timothy-grass, mugwort, cat, dog).

- Testing should preferably be concentrated to a regional unit within specialised health care that provides these types of services
- The physician within primary health care interprets that result of skin testing with consideration of the patient's symptom history and initiates the appropriate treatment. Mild symptoms are treated within the primary health care system; information on allergen avoidance is provided, if appropriate.

Indications for referral to specialised care

- Need for complementary allergological examinations. There is a suspicion of significant, symptom-generating allergens in the patient's home or working environment or food and these allergens have not been identified by the examinations performed within the primary health care.
- Symptoms not controlled despite use of appropriate medication
- Need for desensitization (pollens, animal dust, food). Cf. Current care guidelines: Desensitisation.
- Evaluation of occupational exposure to allergens and the impact this has on the patient's working capacity in the long run.

Examinations/functions within specialised care

- More specific and comprehensive allergy testing (comprehensive skin testing or antibody measurements, examinations for identification of rare allergens, exposition testing), functional examination of the patient's respiratory symptom, tolerance tests, follow-up of working conditions). These examinations always require a visit to a specialist and the specialist's assessment.

- Generalised and severe allergy. respiratory tract and conjunctivae, skin, food reactions, reactions to insects stings, drug reactions that complicate the patient's other therapy, reactions to vaccines, anaphylaxis
- Clinical assessment of the severity of the symptoms and planning of chronic therapy (including desensitization)
- Assessment of occupational exposure and work capacity

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ACCESS TO TREATMENT OF PATIENTS WITH MUSCULOSKELETAL PROBLEMS

ICD disease classification

Symptom/problem/illness affecting the cervical region, upper extremities, cervical spine, back or lower extremities, if surgery is not indicated and if there are no indications of an inflammatory joint disease

M15-25	Arthrosis and other joint disorders
M40-M54	Disorders of the neck and back, including intervertebral disc disorders
M53.0-M53.1	Cervicocranial syndrome, cervicobrachial syndrome
M60-M79	Soft tissue disorders
G44.2	Tension headache
G54.0	Nerve root and plexus disorders

Diagnoses relating to symptoms from the musculoskeletal system are labelled R, S/T or Z and are used if the diagnosis is equivocal and/or if the response to treatment provided within primary health care is suboptimal.

Diagnostic workup

- Differential diagnostic evaluations of the musculoskeletal system requiring special methods and knowhow and multiprofessional assessment of the patient's working capacity and functional capacity; assessment of the need for treatment and rehabilitation
- Evaluation of the appropriate treatment and medication of patients with severe musculoskeletal pain
- Problems related to the musculoskeletal system and the functional capacity of patients with neurological diseases or of polytraumatised patients

Assessment of need for rehabilitation aids

Mainly assessment of the need for rehabilitation aids to support mobility and activities of daily living, including prostheses after amputations, cf. General principles of assessment of the need for rehabilitation aids.

Tasks within primary health care and occupational health care

- Initial diagnostics, treatment and assessment by a physical therapist or general physician; physical exercise guidance according to the local work distribution and the Current care guidelines
- Use of the expertise within the occupational health care sector to assess the patient's working capacity, working conditions and ergonomics at work. Evaluation of the psychosocial risk factors that subject the patient to chronic musculoskeletal problems.
- Establishment and execution of the initial plan for treatment and rehabilitation; execution and follow-up of the medical and occupational plan designed by the specialised health care

Information required in non-emergency referral

- History: illnesses, diseases and disorders; previous surgery; disorders and injuries of the musculoskeletal system that affect the patient's ability to function; previous rehabilitation efforts and their outcomes; description of the patient's symptoms; duration of work incapacity (sickness leave); duration of functional incapacity

- Current condition: clinical findings on physical examination, description of the patient's ability to function and examination results
- Problem definition, reason for referral

Indications for referral to specialised care

Treatment is considered when the score exceeds 50. The indication for consultation is always based on an individual evaluation. Even in cases where the score is sufficient, it may still be justifiable to refrain from consultation, if it is to be expected that the patient, after due consideration of co-existing diseases and other factors, would not benefit from the consultation. If the criteria for referral are not met, the condition should, as a rule, be attended to by the primary health care. Decisions deviating from the unified criteria must be explained in writing.

- *Findings on physical examination, results of examinations*
50 points Exceptional symptoms (e.g., progressive pain) and/or abnormal findings (limping, abnormal laboratory or imaging result, suspicion of cancer) which require additional diagnostic investigations of the musculoskeletal system within specialised health care
- *Pain-induced disability in activities of daily living*
5 points Minor
10 points Moderate
20 points Marked
30 points Intolerable
- *Impairment of functional capacity* (must be detailed in referral)
5 points Mild
10 points Moderate
20 points Severe
- *Duration of work incapacity and functional incapacity*
0 points Less than 6 weeks
10 points more than 6 weeks
20 points more than 12 weeks
- *Treatment response*
10 points Partial
20 points No response
- *Other cause* (must be detailed in referral)
10 points e.g., situation is out of control, no diagnosis

Current care guidelines (Adult lower back disorders; Neck pain; Treatment of knee and hip osteoarthritis; Repetitive strain injuries of the hand and forearm)
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ASSESSMENT AND TREATMENT OF CHRONIC PAIN

There is only a thin line between urgent/emergency and non-urgent need for treatment of chronic pain and the assessment of the need for treatment can only be made after the first physician has evaluated the patient and done the pertinent examinations. Urgent referral is needed if there is a suspicion that the pain is due to tissue damage which, if untreated, progresses rapidly.

These instructions are complementary to the diagnose-specific instructions elsewhere in this book which have precedence.*

ICD disease classification (symptom/problem/disease/illness/disorder/ailment)

- Prolonged moderate or severe pain which continues unabated despite treatment given within primary health care or by other fields of specialty and the cause of which is known; for referral of the patient to specialised health care, the condition must fulfil the criteria below
- Prolonged moderate or severe pain which has remained undiagnosed by primary health care and which cannot be referred to other fields of specialty; for referral of the patient to specialised health care, the condition must fulfil the criteria below
 - R52 Pain, not elsewhere classified
 - R52.1 Chronic intractable pain
 - R52.2 Other chronic pain
 - R52.8 Pain, unspecified
- Severe pain is defined as pain that is substantial, causes work incapacity or prohibits the patient from doing his/her activities of daily living or interrupts the patient's sleep at night. The patient may seek repeatedly help from health care actors.
- Moderate pain is defined as pain that impacts on the working performance of the patient but does not cause work incapacity (e.g., work to substitute for the original work performance is possible), and which disturbs their activities of daily living, hinders mobility, affects the way the patient is moving about or prohibits regular physical training

* *Physical medicine and rehabilitation*: non-emergency access to treatment of patients with musculoskeletal problems

Internal medicine: unspecific chest pain, gastro-oesophageal reflux disease, dyskinesia of the oesophagus, dyspepsia and ulcer disease, irritable bowel syndrome, coronary heart disease and rheumatic diseases

Surgery: patients with a rheumatic disease, haemorrhoids, inguinal, femoral, umbilical and abdominal hernia, diverticulosis, anal fissure, gall stones, the carpal tunnel syndrome, arthrosis of the proximal phalanx of the thumb, carpal ganglion cyst, Dupuytren's contracture (palmar fibromatosis), arthrosis of hip joint (coxarthrosis), arthrosis of knee (gonarthrosis), hallux valgus (bunion) and hallux rigidus, degenerated rotator cuff, non-emergency arthroscopy of knee joint, stenosis of the lumbar spine, spinal disc herniation, thoracic outlet syndrome, coronary artery disease, hydrocele, intermittent claudication, intermittent claudication and gynaecomastia

Neurosurgery: spasticity, movement disorders and chronic pain, trigeminal neuralgia and cervical disc disorder with radiculopathy

Gynaecology: non-emergency hysterectomy

Paediatrics: abdominal pain in children, children with joint ailments, treatment of childhood headache.

Oro-dental diseases: malfunction of the chewing organs and temporomandibular joint within primary health care, abnormalities of the face and jaws within specialised health care, poor function of chewing organs and the temporomandibular joint.

Neurology: non-emergency referral on the basis of symptoms, disease-specific indications for treatment access.

Tasks within primary health care and occupational health care

The primary treatment responsibility for the patients lies with the primary health care which may consult the specialised health care, as needed. The treatment of chronic pain is based on a good relationship between the patient and the patient's family doctor. Functions within primary care:

- History and physical examination of the patient with pain and, if needed, additional examinations available within primary health care with the following goals:
 - Identification of the type of pain (nociceptive, neuropathic, or other)
 - diagnosis of the condition that gives rise to the pain
 - identification of the psychosocial background factors which affect the risk of the pain becoming a chronic condition: the patient's own view on the pain and how it influences him/her, the mood of the patient which may, if necessary, be assessed with the DEPS-screening method, conditions within the family and at work, substance abuse
- Causal and symptomatic treatment of the pain to the extent required of primary health care according to Current care guidelines and other regional and national treatment guidelines
 - evidence based treatments should be used primarily
 - the treatment response is recorded by describing the intensity of the pain and the impact of the pain on the patient's capacity to function
 - the risk factors for chronic pain are modified as far as possible (e.g., treatment of depression)
 - If the reason for the pain is known, the primary health care may require advice on treatment by consulting the regional pain clinic by telephone, electronically or in writing. The patient is referred for non-emergency treatment only if the pain remains moderate or severe despite treatment of the patient according to the instructions given by the specialised health care.
- Decisions regarding the patient's working capacity based on symptoms and clinical findings. Long periods of work absenteeism should be avoided, except in unequivocal special cases.
- Support to the patient's pain control strategies; especially if the musculoskeletal pain is prolonged, the patient should be supported to take appropriate exercise and to make lifestyle and attitude modifications to augment pain control.
- Primary health care may also provide group rehabilitation and per support to help patients with chronic pain
- Management of the medical rehabilitation dictated by the patient's illness or injury
- Use of the expertise within the occupational health care sector to assess the patient's working capacity, working conditions and ergonomics at work. Especially multiproblematic patients at risk of social exclusion are referred for rehabilitation examinations, if appropriate.
- Referral, if needed, for multiprofessional inpatient rehabilitation. A necessary requirement for successful rehabilitation is that an appropriate diagnostic workup with regard to the pain has been carried out.

Information required in non-emergency referral

- Problem definition, reason for referral
- History: general illnesses, medication, current illness and history, examinations and outcomes, previous therapies and outcomes, pain intensity, current therapies, essential psychosocial circumstances (e.g., profession, occupation, work incapacity/absenteeism, mood, and substance abuse).
- Physical findings and description of patient's functionality

Indications for referral to specialised care*I Pain the cause of which is known*

- If the cause of the pain is known and the pain is moderate or severe and the patient's functionality is impaired despite appropriate measures within primary health care to treat the condition or if the pain is prolonged and more severe than expected with consideration of normal convalescence, the patient should be referred to specialize health care as follows:
 - (nociceptive) musculoskeletal pain with no signs of inflammation or infection: referral to outpatient department of physical medicine and rehabilitation
 - (nociceptive) musculoskeletal pain with signs of active inflammation or infection: referral to outpatient department of rheumatic diseases
 - neuropathic pain: referral to outpatient pain clinic or outpatient department of neurology in accordance with regional instructions
 - complex regional pain syndrome (CRPS) referral to outpatient pain clinic or to outpatient department of physical medicine and rehabilitation in accordance with regional instructions
 - consideration of initiation of treatment with potent opioid for other pain than cancer-related pain: referral to outpatient pain clinic
 - consideration of treatment with spinal cord stimulator referral to outpatient pain clinic or to outpatient department of neurosurgery in accordance with regional instructions
 - treatment of the patient's pain required multiprofessional collaboration: referral to outpatient pain clinic or for multiprofessional assessment in accordance with regional instructions
- Especially young adults with pain that impairs their capacity to work and who thus are at risk of occupational exclusion are referred to a pain clinic for evaluation or for multiprofessional assessment in accordance with regional instructions

II Pain with unknown aetiology

- The patient is referred to specialised health care if the pain impairs the patient's occupational capacity or his/her activities of daily living and if examinations by the primary health care have not provided a diagnosis
 - suspicion of musculoskeletal pain: referral to outpatient department of physical medicine and rehabilitation
 - suspicion of visceral pain or inflammatory rheumatic disease: referral to outpatient department of internal medicine
 - headache, or suspicion of neuropathic pain of unknown aetiology, or suspicion of pain related to undiagnosed neurologic condition: referral to outpatient department of neurology

- suspicion of complex regional pain syndrome (CRPS): referral to outpatient pain clinic or to outpatient department of physical medicine and rehabilitation in accordance with regional instructions
- suspicion of somatisation disorder or of some other mental disorder or illness as the cause of pain: referral to outpatient department of psychiatry
- orofacial pain: referral to outpatient clinic of orodental diseases, or of otorhinolaryngology or of neurology, in accordance with regional instructions
- If the cause of the pain is unknown despite examinations and other efforts of primary health care, the patient should visit the unit within specialised health care referred to within 3 months if the pain is moderate and within 1 month if the pain is severe

Treatment within specialised health care

- The follow-up after surgery or treatment response after injuries is the responsibility of the unit within specialised health care that provided the service, but follow-up after this may also be delegated to primary health care, if clear instructions are provided. Problems of convalescence after surgery and treatment of injuries must be assessed urgently by the unit that provided the service to the patient. If the cause for the pain remains unknown or relief cannot be provided, the patient is referred to a pain clinic, if the pain is moderate or severe. If the postoperative pain or the pain after an injury is severe, the patient should visit the pain clinic within 1 month, because in such cases the pain is usually neuropathic or due to CRPS, and the prognosis of these conditions is positively affected by timely intervention. Moderate postoperative pain or pain after an injury should be evaluated at a pain clinic within 3 months of referral.
- Treatment of the pain of patients with numerous illnesses and problems should be carried out as multiprofessional teamwork so that the responsibility of coordinating the efforts around the patient resides with one specific unit within specialised health care and other specialties provide consultations. In practice, this requires multiprofessional team meetings and flexible open care and ward consultations.
- If the patient with pain is a child, the patient is referred to a paediatric outpatient unit which may consult other specialties.
- If the patient with pain is elderly, the patient is referred either to a pain clinic or to a geriatric outpatient department in accordance with regional management guidelines. Especially if the patient is elderly patients and has many illnesses, collaboration among different specialties is necessary; inpatient treatment is often needed.
- If the diagnostics or treatment of a patient referred to specialised health care because of pain require assessment by some other specialty, the consultation with this specialty should be arranged within 1 month if the pain is severe and within 3 months if the pain is moderate; the entire treatment programme within specialised health care should be carried out within a reasonable period of time.
- The imaging and neurophysiologic examinations requested by a specialist on the basis of his/her clinical judgment should be carried out within 1 month if the patient's pain is severe and within 3 months if the pain is

moderate; necessary adjunctive tests and examinations may not prolong the planning and execution if the treatment to any significant degree.

Current care guidelines (adult lower back disorders; neck pain; migraine; childhood headache; treatment of knee and hip osteoarthritis. The following guidelines are being prepared: functional disturbances of the chewing organs; occupational musculoskeletal disease of the upper extremities.)

www.kaypahoito.fi

Other references:

CRPS. Jukka Lempinen, Markku Hupli ja Seppo Mustola. CRPS-kipuputilaan hoitoketju Etelä-Karjalan sairaanhoitopiirissä. (Treatment chain of patients with CRPS-pain within the Hospital District of South Carelia. Accessed through www.terveysportti.fi

Haanpää M. Neuropaattisen kivun näyttöön perustuva hoito. (Evidence-based treatment of neuropathic pain.) Duodecim 2004;120: 213-220.

Hannonen P. Mikä hoidoksi fibromyalgiaan? (How to treat fibromyalgia?) Suomen Lääkärilehti (Finnish Medical Journal) 2005;60: 3625-9.

Kalso E, Paakkari P, Stenberg I. Treatment of chronic pain with opioids. National Agency for Medicines 2004.

SBU: Metoder for behandling av långvarig smärta (Methods of how to treat chronic pain) www.sbu.se

Tilvis R. Vanhusten kivut. (Pain and the elderly.) Duodecim 2004;47: 223-7

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GENERAL PRINCIPLES OF REHABILITATION AID SERVICES

- The services of medical rehabilitation aids is directed toward persons whose functional capacity is impaired because of injury, illness or developmental disability and who cannot fully manage their activities of daily living independently of other people and on their own.
- Access to services requires the presence of an illness, injury or functional impairment diagnosed by a physician who has also diagnosed functional impairment due to this condition.
- The need for rehabilitation aids is always assessed individually with regard to the client's situation as a whole (functional capacity, life situation, safety when using rehabilitation aids, environment where the aid will be used and the totality of services that the client receives).
- The client and the persons who provide support to the client must be instructed in how the aid is used to guarantee that the aid is used appropriately and safely.
- Those aids have priority which are needed to safeguard the client's vital and crucial activities of daily living or which are a necessary support for maintaining the patient's functionality independent of other people. Priority is assessed by the following criteria, among others: 1) disease progression, 2) need due to the injury / disability, 3) aids which facilitate home care (rather than ward care), 3) threat of institutionalization of the client, 4) requirements set by the growth and development of children, and 5) proper use of the aid improves the client's safety.
- If the client moves to another location, the aids follow free of charge. Information about the aids must be provided to the corresponding rehabilitation aid service which now becomes responsible for follow-up of the client and service to the aids.

Rehabilitation aid services in primary health care

- Primarily rehabilitation aid services that require only basic knowhow
- Based on the assessment of a health care professional (e.g., physician, therapist, home nurse) aids may be provided for short-term or long-term needs. A requirement for provision of rehabilitation aids for long-term use is that the client has a chronic or permanent disability.
- The usual aids for mobility, activities of daily living and sensation are loaned from the rehabilitation aids loaning units of the health care centres and departments of physical rehabilitation and ergotherapy of the hospitals. The client or his/her family may contact the rehabilitation aids loaning unit of the health care centre immediately after the need for the aid has arisen.

Information needed for referral to specialised care and referral indications

- When the determination of the need for an aid, the choice of an appropriate aid and maintenance of the aid requires specialised knowhow
- The referral to the rehabilitation aid services within specialised health care must be written by a physician. However, there may be regional or local agreements which permit referrals also by other professionals within health care, social care or some other administrative sector.

- The referral should include a description of the client's functional disability, disability caused by the disability and a record of which other aids and services the client has access to.

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ELECTRICAL VEHICLES TO FACILITATE MOBILITY

The client must be able to use the aid safely from his/her own point of view and from the point of view of the surroundings. The user's independence, mobility and possibilities to participate in societal activities should improve with the use of an electric-powered wheelchair or electric moped. Assessment of the need for the aid and adaptation of the aid for use by the client should generally be made in the client's living environment which should be appropriate for the aid

Electric-powered wheelchair and electric moped

- The client is unable to move around indoors and / or outdoors independently with lighter mobility aids because of poor functional capacity, e.g., the muscle power of the upper extremities is insufficient to allow the use of a regular wheel chair.
- The reduced functional capacity may be a consequence of accidental injury or of any medical illness, disease or condition.
- The client is usually multidisabled or has several illnesses.
- The driver of an electric-powered wheelchair or an electric moped must fulfil the following qualifications: 1) master the driving process, 2) sufficient vision and ability to make observations of the surroundings, 3) motivation, initiative, goal-setting, and 4) consideration of other people in the traffic and an understanding of the potential dangers. The environment where the aid is used must have the space and facilities for appropriate storage and battery charging.

Power-assisted wheelchair with add-on motors

- The function of the upper extremities is impaired and thus they client does not have the physical strength to move the wheelchair manually.
- The 1) client should master bimanual propagation of a regular wheelchair, 2) the client or an assistant knows how to install the power-assisting device to the wheelchair. The environment where the aid is used must have the space and facilities for appropriate storage and battery charging.

Wheelchair with power-assistance for the carer

- The functional impairment of the client makes moving around impossible or difficult, e.g., with a manual or electric-powered wheelchair in the client's environment.
- Primarily, other forms of support and service should be provided to facilitate the work of the assistant, or a maximally light wheelchair (easy to move around) should be borrowed.
- If this is not possible, the second alternative is to provide a power-assistance device for the carer, if 1) the size and strength of the carer are insufficient due to the bigger size and weight of the client, 2) the client is active and finds interest in being mobile, in caring for his/her own matters and in participating in leisure-time activities outside the home, 3) use of the device postpones the need for institutionalization of the multidisabled client
- The requirements on the carer and the client's environment are that 1) the carer can apply the device to the wheels of the wheelchair, and 2) the carer is able to use the device safely in the environment which harbours space and facilities for appropriate storage and battery charging

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COMMUNICATION AND COMPUTER USE

Aids for communication

- A person with a speech disability (intact hearing, but daily communication is hampered by difficulties to speak or to understand what is spoken) requires communication aids. Speech disabilities may be associated with difficulties to read and to write.
- The aids may consist of various, individually applied aids exploiting graphic images or text, and of speech generating devices (voice output communication aids) of various degrees of complexity. A computer with accessories may also be needed for speech generation, if the client's communication cannot be safeguarded otherwise.

Computer and aids to facilitate computer use

- Computer software, specially designed mouses and other accessories may be appropriate as rehabilitation aids if the client is unable to use a computer without them.
- A computer may be an appropriate (re)habilitation aid for a child, if the child is, due to motor or other dysfunction, unable to write with other media and the child's cognitive capabilities are sufficient for writing.

Procurement of rehabilitation aids requires the following:

- Individual assessment and a test period of use of the aid
- A multiprofessional team consisting, e.g., of a speech and language therapist familiar with rehabilitation aids, an ergotherapist and a technical expert. It is crucial that rehabilitation, health care and pedagogics personnel collaborate.
- It is recommendable that there is one person in the vicinity of the client, who makes himself/herself familiar with the client's rehabilitation aids and who can, if needed, instruct, support and advise the client in the use of the aids. .

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ENVIRONMENTAL CONTROL UNITS, MOBILITY OF CHILDREN AND ACTIVITIES OF DAILY LIVING OF CHILDREN

Environmental control units

- The user of an environmental control unit is a severely disabled person with restriction of many functions and who cannot manage his/her activities of daily living without the help of another person.
- The user must have sufficient cognitive capacity and the capacity to perform a controlled, repeated movement required for operating a switch.
- The rehabilitation aids services of the central hospitals must have expertise in evaluation of the totality, planning and acquisition of aids devices. This evaluation is made in the living environment of the client and the set of aids required by the client is constructed individually.

The environmental control unit allows the client to manoeuvre by remote control the electrical devices and appliances within the home (e.g., lights, door opening, telephone, home electronics). The system may also include alarm and calling functions. The system includes senders, switches and receivers.

Isolated devices for environmental control, e.g., door openers and door telephones, are generally reimbursed by the social sector in accordance with the Act on Services and Assistance for the Disabled (380/1987). A health and social service professional may make the assessment of the need for environmental control devices.

Aids to children to support mobility and activities of daily living

- The aids make it possible for the child to move about, to take part in group activities and to participate in the daily functions together with other people.
- The aid is a support to the child's individual growth and development and strengthens the child's physical, mental and social capabilities.
- The aid supports therapy, e.g., by influencing spasticity, preventing contractures (shortening of muscles) and alleviating pain.
- The aid facilitates the work of the parents and assistants by making care of the client less strenuous.
- The growth and development of children mandate more frequent renewal of rehabilitation aids for children than for adults. Thus, the appropriateness of aids used by children must be followed closely by persons involved in the care of children and close collaboration with experts on rehabilitation aids.
- Evaluation of the need for rehabilitation aids, their selection and instruction of use demands special knowhow. Rehabilitation of patients within child neurology and paediatrics involves assessment of the need for aids, instructions on how to use them and follow-up of the benefit from using aids.

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REHABILITATION AIDS SERVICES WITHIN SPECIALISED HEALTH CARE FOR PATIENTS AFTER AMPUTATION OF AN EXTREMITY

The indications for use of extremity prostheses are dictated by the remaining functional capacity of the client and by the intended use of the prostheses (moving from one place to another, moving around in the environment, occupation, hobbies etc.). The first prosthesis after amputation of an extremity is acquired on the basis of the patient's general condition, convalescence, disease prognosis and motivation to use prosthesis.

A condition for acquisition of prostheses is sufficient expertise. The expertise, at least, of a physician, rehabilitation aids technician and physiotherapist / ergotherapist is needed. Problems related to the amputation stump and their treatment require often special expertise.

Upper extremity prosthesis

- The prosthesis is chosen with consideration of the client's individual needs, age, profession, amputation level etc.
- A mechanical or cosmetic prosthesis is given priority.
- Myoelectric prostheses are used only if recommended by an expert team: for either of the upper extremities at least when a) both upper extremities are partially absent, or b) one of the upper extremities is absent and the contralateral extremity functions poorly, 2) for children who lack an upper extremity a myoelectric prosthesis is considered when the child is 2 – 3 years old.

Below the knee prosthesis

- A temporary prosthesis is fitted when the clinical situation allows. The value of the temporary prosthesis with regard to the client's functionality is assessed while it is in use.
- A below the knee prosthesis is useful also if it only makes it easier for the client to move from his/her wheelchair to his/her bed.

Above the knee prosthesis

- When deciding on an above the knee prosthesis, careful consideration has to be taken with respect to the patient's prognosis and remaining functionality. A prosthesis is fitted, if it is expected to improve the patient's functionality.

Waterproof prostheses

- Waterproof prostheses ("bathing prostheses") are provided on the basis of the individual client's needs once the amputation stump has reached its final form.

Special components (microprocessor-driven articulations, carbon fibre foot blades etc)

- The need for these special components must be assessed individually; the demands set on the prosthesis and the activity (young people, occupation etc) need to be taken into account.

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CRITERIA FOR REHABILITATION AIDS SERVICES FOR VISUALLY DISABLED PERSONS

A person is visually disabled, if

- The visual acuity of the better eye with best possible lens correction is less than 0.3
- The field of view of both eyes together has a diameter of less than 60°, or
- Vision is reduced for some other reason to such an extent that the functional deficit (disability) is at least 50%

Primary care

- Tape recorders, dictaphones, other audio devices, speech and text magnification software for mobile phones, white canes

Specialised hospital care: Eyeglasses and contact lenses

- Correction for refraction and presbyopia is not sufficient to improve the client's near vision and far vision.
- Shields to prevent glare from the sides or from above; shields to protect from pressure on the eyes for children
- Dark and filtering lenses and surface processing may also be reimbursed, if this improves the patient's functionality.
- The patient may obtain new glasses free of charge, if a change of the lens refraction improves the client's vision.
- New glasses may be reimbursed to replace glasses that are in poor condition at the earliest 5 years after the rehabilitation decision, but for clients below age 16, replacement may be made more often based on individual evaluation.

Specialised hospital care: Closed circuit television for text and image enhancement

- The visually disabled person cannot read normal-sized text (Jaeger -0.4 or similar) without unreasonable difficulty with any other aid.
- The television set may be black-and-white or colour, depending on the client's individual preference.
- The aid should reduce the client's dependence on other people.
- The client has the physical and mental capacity required to operate the television set.
- An expert in the field of aids for visually disabled people is responsible for the appropriateness of the appliance and for instructions on its use.

Specialised hospital care: Computer peripherals and software*

- The client is unable to read, write, and acquire and forward information without peripherals.
- The client's ability to use a computer and his/her ability to learn how to use the aid are assessed individually.
- An expert in the field of aids for visually disabled people is responsible for the appropriateness of the appliance and for instructions on its use.

* e.g., speech synthesiser, screen magnification software, screen reading software, Braille displays, scanners and similar computer peripherals and software

Specialised hospital care: Braille display for mobile phones

- For deaf and blind clients by individual assessment

Specialised hospital care: Guide dogs

- Blind or profoundly visually disabled person whose residual vision is not helpful for moving around in an unfamiliar environment
- The client must be able to orient him/herself and to move around with a white cane
- A rehabilitation counsellor for visually disabled persons assesses the need for a guide dog in collaboration with an expert from the Guide Dog School. The Guide Dog School assesses the suitability of the client as a dog owner.

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CRITERIA FOR NON-EMERGENCY ACCESS TO TREATMENT / MEDICAL IMAGING

INTRODUCTION

The decree of the Ministry of Social Affairs and Health, which is based on a directive by the European Council, as stated in the Radiation Act (1142/1999) and Radiation Decree (423/2000), obligates those who use ionizing radiation to evaluate whether medical imaging studies are justified or not. This evaluation requires closer specification of the indications for the imaging procedure and assessment of the referrals for these examinations. As an example: the impact of plain radiography on the treatment of the patient is often debatable and these imaging studies are still made too often. For these reasons a number of referral recommendations for imaging have been published, and the most useful is the one published by the European Commission (Radiation protection 118: Referral guide for imaging). The information and instruction in this guide have been used for designing the present criteria.

This summary relates only to non-emergency referrals. Information on emergency examinations and, largely, on urgent examinations required for diagnostic purposes has been left out. Since the examinations needed for diagnosing cancer and for follow-up of cancer treatment are urgent, they have consequently been left out; examinations with regard to rare indications or conditions have also been excluded from this presentation. Understandably, then, this summary does not cover all indications for medical imaging.

This presentation includes different techniques of imaging and recommendations on how these techniques should be used primary and secondarily and recommendations for the time frame within which the study should be made. If appropriate, some imaging examinations have been grouped by specialty (e.g., paediatric radiology). Some of the imaging methods include a list of indications which are considered to be unsuitable for that imaging method or where imaging is not productive. The geographic distribution of the availability of plain radiography is good and there is usually no significant delay for patients to access these imaging examinations. We have thus not presented any specific recommendations of the degree of urgency for these examinations. They are included to facilitate the physician's decision on which method to choose as the most appropriate one. Nuclear imaging is seldom the primary imaging method and the recommendations focus on continued assessment if the diagnosis is open. The tables include a column marked "Note" for additional suggestions to the physician deciding on the imaging examination.

These instructions have been created in by radiologists throughout Finland in collaboration with clinicians.

The material is presented as MSExcel tables. This facilitates electronic dispersion of the information, allows user-oriented grouping of the relevant examinations and flexible use of the information. The tables are arranged by imaging method grouped according to medical specialty.

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1. ANGIOGRAPHY

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
1.1 Vascular surgery and neurosurgery	Preliminary invasive examination of claudication		< 3 months	
	Planning of invasive treatment of patients with TIA / symptomatic carotid stenosis in minor stroke		< 1 month	
	Planning of invasive treatment in patients with major stroke and carotid stenosis		< 1 month	
	Peripheral vasculitis		< 3 months	
		Planning of treatment of aortic aneurysm	< 3 months	Computerised tomography (CT) primary method
		Peripheral vascular malformations	< 6 months	Magnetic resonance imaging (MRI) primary method
		Continued examination if carotid stenosis undefined with other methods	< 3 months	
1.2 Neurosurgery		Follow-up of carotid and vertebral dissections	< 3 months	
	Planning of treatment of non-haemorrhagic intracranial aneurysms		< 3 months	
	Planning of treatment of malformations		< 3 months	
		Follow-up on diagnosed, non-haemorrhagic aneurysm	< 6 months	
				Never or seldom useful: As follow-up examination of venous malformations after MRI

2. NUCLEAR IMAGING

2.1 NUCLEAR IMAGING OF THE BRAIN

Specialty	Primary indication	Secondary indication	Urgency	Note
2.1.1 Scintigraphy of postsynaptic dopamine receptors of the brain	Differential diagnosis of Parkinson-like conditions		< 3 months	
		Assessment of blockade of D2-receptors by medication	< 3 months	
		Diagnosis of schizophrenia	< 3 months	
		Never or seldom useful: changes in brain circulation		
2.1.2 Scintigraphy of dopamine transporters in the brain	Parkinson's disease: differential diagnosis and early diagnosis		< 3 months	
	Parkinson's disease: assessment of disease progression		< 3 months	
	Parkinson's disease: assessment of effect of pharmacotherapy		< 3 months	
	Differential diagnosis of dementia		< 3 months	
		Characterisation of cerebral infarction	< 1 month	
		Diagnosis of epileptic focus	< 1 month	MRI primary method
		Assessment of neuronal destruction (brain inflammations, certain ischaemic conditions of the brain)	< 1 month	
	Never or seldom useful: changes in brain circulation, brain tumours and metastases			

2.1 NUCLEAR IMAGING OF THE BRAIN (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
2.1.3 Brain perfusion scintigraphy	Differential diagnosis of dementias		< 1 month	MRI primary method
	Early diagnosis of Alzheimer's disease		< 1 month	MRI primary method
	Localisation of epileptic focus preoperatively		< 1 month	MRI primary method
	Proving disturbed cerebral circulation		< 1 month	For planning of intra-extracerebral bypass, evaluation of endarterectomy, evaluation of vascular spasms in SAH patients when planning time of surgery
		Suspicion of brain damage in neonates	< 1 month	MRI primary method
		Disturbed brain circulation in acute stroke and TAI	< 1 month	MRI primary method
		Psychiatric conditions	< 1 month	

2.2 LSKELETAL SCINTIGRAPHY

Specialty	Primary indication	Secondary indication	Urgency	Note	
	Identification of skeletal metastases in cancer patients with symptoms or at high risk		< 1 month		
	Suspicion of sacrolitis		< 3 months		
	Suspicion of metabolic bone disease		< 3 months		
	Suspicion of avascular necrosis		< 1 month		
	Suspicion of strain-related pain		< 3 months	Stress fracture, fasciitis	
	Suspicion of entesopathy		< 3 months		
	Assessment of unclear finding in plain radiography or MRI		< 1 month		
	Suspicion of reflex sympathetic dystrophy				
				Never or seldom useful: suspicion of myeloma	

2.3 CARDIAC NUCLEAR IMAGING

Specialty	Primary indication	Secondary indication	Urgency	Note
2.3.1 Scintigraphy of myocardial perfusion	Diagnostics of coronary artery disease			
	When the pre hoc likelihood of coronary heart disease is moderate			
	LWhen changes of ECG at rest do not allow interpretation of results of exercise testing			YDepression of < 0.1 mV e.g. due to hypertrophy, pacemaker; left bundle branch block or WPW-syndrome
	Patient cannot undergo exercise testing e.g. due to musculoskeletal disease			
	IDemonstration of ischaemia in symptomatic patient with previous revascularisation or PTCA			
	IDemonstration of ischaemia when the pre hoc likelihood of coronary heart disease is high but exercise testing does not show significant ST-changes			
	Evaluation of degree of coronary heart disease			
	If the pre hoc expectation of coronary heart disease is greater than insignificant (>15 %) and the choice of optimal and cost-effective strategy is to be decided (non-invasive vs. invasive)			
	SAfter coronary angiography, if the impact of the findings is not clear			
	Planning and/or choice of CABG and/or PTCA			
	Evaluation and follow-up of restenosis after PTCA			

2.3 CARDIAC NUCLEAR IMAGING (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
(continued) 2.3.1 Scintigraphy of myocardial perfusion	Assessment of surgical risk before major operations	SDiagnosis of coronary artery disease and assessment of patient's prognosis		
		If the pre hoc likelihood of a false positive outcome of an exercise test is high (e.g., atypical chest pain, young patient, female under 50 years), and further examinations are clinically clearly indicated		
		If there is a suspicion that the findings at exercise testing are falsely positive and further examinations are clearly indicated.		
		If the exercise test is submaximal and further examinations are clinically clearly indicated		<i>HNever or seldom useful: when the pre hoc likelihood of coronary heart disease is <10 %, and there is no clinically urgent reason to exclude significant coronary heart disease</i>
2.3.2 Scintigraphy of cardiac shunt	Diagnosis of cardiac shunting and measurement of the magnitude of the shunt			
2.3.3 Scintigraphy of cardiac function (planar multiple gated acquisition [MUGA] technique)	Postinfarction			
	Follow-up of cardiomyopathy			
	Assessment of right ventricle function			

2.4 NUCLEAR IMAGING OF KIDNEYS AND REFLUX

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
2.4.1 Scintigraphy of renal function	Assessment of fractional function of both kidneys, e.g., prior to radiation therapy to the kidneys or nephrectomy		< 1 month	Study programmed according to start of renal radiation therapy
	SFollow-up investigation after urological surgery		< 3 months	Depends on operation
	Determination of renovascular causes for hypertension		< 1 month	Capropril-enhanced scintigraphy
2.4.2 Scintigraphy of renal parenchyme	Identification of functional pathology in specific areas of the renal parenchyma, e.g., in connection with urinary tract infection		< 1 month	Never or seldom useful: 1) If patient is dehydrated 2) if the creatinine level is very high
	Assessment of abnormal location (e.g., in pelvis) or form (e.g., horseshoe kidney)		< 3 months	
2.4.3 IScintigraphic micturition cystography (scintigraphy or urinary reflux flow)	Primary examination to assess reflux in toddler-girls or school-aged girls		< 1 month	
	Follow-up examination for patients with urinary reflux flow (both surgically and conservatively treated patients)		< 1 month	
	For repeated follow-up of children with a neurogenic bladder and a consequently high risk of secondary reflux		< 1 month	
			< 1 month	
		As a screening procedure to identify reflux in asymptomatic siblings to patients with reflux, if there is a high suspicion of genetic reflux disease or renal malformations	< 1 month	

2.5 OTHER SCINTIGRAPHIC EXAMINATIONS

Specialty	Primary indication	Secondary indication	Urgency	Note
2.5.1 Scintigraphy of infectious foci (In-111 labelled granulocytes, Tc99m-HMPAO labelled leukocytes, granulocytes with Tc99m labelled monoclonal antibodies, Tc99m-HIC, Ga-67, FDG-PET imaging)	Intraabdominal infection foci (abscesses, diverticulitis, gynaecological infections, assessment of activity of inflammatory bowel disease)		< 1 month	
	Demonstration of pulmonary complications of AIDS		< 1 month	((Gallium-67 does not accumulate in Kaposi's sarcoma)
	Chronic osteomyelitis (FDG-PET)		< 1 month	
	Imaging of rheumatic arthritis		< 1 month	
	Charcot's joint		< 1 month	
				Never or seldom useful: Infections in lung area (with radioactively labelled leukocytes)
2.5.2 Scintigraphy of thyroid gland	Planning of radioiodine therapy	HDifferential diagnosis of hyperthyroidism (Basedow's [Graves'] disease, toxic multinodular goitre, toxic adenoma etc.)		
		Diagnosis of subacute thyroiditis		
		Functional classification of thyroid nodule		
		Demonstration of thyroid gland ectopy, aplasia and hemiagenesis		
2.5.3 Localisation of sentinel node	RBreast cancer, cutaneous melanoma, melanoma of mucous membranes, vulvar cancer, penis cancer, tumours of the head and neck		< 1 month	If metastasis is not obviously clinically or with other methods and if lymph node status is important for treatment

3. MAGNETIC RESONANCE IMAGING (MRI)

3.1 MAGNETIC RESONANCE ANGIOGRAPHY (MRA)

Specialty	Primary indication	Secondary indication	Urgency	Note
	Cerebral arterial aneurysms		< 6 months	Family screening, young patients
	Suspicion of AV-malformation		< 3 months	Buzzing in ears, pulsating tinnitus
	Suspicion of vasculitis		< 3 months	
	Suspicion of aneurysm in thoracic aorta		< 2 months	Follow-up
	Angiographies of lower extremities		< 3 months	For these patients: renal failure, patients with known vascular changes in pelvis, sensitivity to iodine contrast media, renal transplant.
	Examination of jugular veins		< 1 month	Arrhythmias requiring catheterisation, MRA pre and post procedure
	Examination of extracardiac vessels in congenital cardiac malformations		< 1 month	CT an alternative if anaesthesia is required
	Postoperative follow-up of congenital cardiac malformation		< 1 month	
	Pericardium diseases		< 1 month	
	Cardiac tumours		< 1 month	MRI may be needed very urgently
		Suspicion of carotis stenosis on the basis of Doppler findings	< 3 months	VContrast angiography an alternative to CT

3.2 NEURORADIOLOGICAL-SURGICAL MRI

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
3.2.1 MRI of musculoskeletal system	The American Congress of Radiology (ACR) recommends plain radiography of all joint imaging before MRI	Acute monoarthritis	< 3 months	Instability, cartilage, menisci
		Polyarthralgia	< 3 months	Identification of hydrops / synovitis, bone involvement in arthritis
		Ankylosing spondylitis	< 6 months	More sensitive for incipient erosions, demonstrates inflammation in sacroiliitis and occasionally paraspinally
		Gout	< 3 months	For arthritis diagnostics, equivocal for differential diagnostics (typically permanent, areas of usually low-T1-signal intensity)
		Neuropathic arthropathy (Charcot)	< 1 month	Differentiation with respect to infection (in diabetes)
		Arthrosis (degenerative joint disease)	< 6 months	Degree of cartilage damage; cartilaginous free fragments, menisci; incipient arthrosis occasionally in hip joints: cartilage damage before narrowing of joint space (dysplasia); coxalgia with no findings in plain radiography; atypical symptom in arthrotic joint; identification / exclusion of other causes
				Identification of synovitis on big joints
		Psoriatic arthritis	< 6 months	Early diagnosis before erosions appear, synovitis in big joints, cartilage damage, secondary pathology (osteonecrosis) or atypical pain, non-rheumatic indications
		Rheumatoid arthritis	< 3 months	

3.2 NEURORADIOLOGICAL-SURGICAL MRI (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
(continued) 3.2.1 MRI of musculoskeletal system	Myeloma		< 3 months	Identifies diffuse bone marrow pathology (tumour tissue of low signal intensity replaces normal high-signal bone marrow). May identify compression of spinal cord due to vertebral fracture.
			< 3 months	Best method to demonstrate and localise meniscus injury, identifies other pathology concomitantly (ligaments, cartilage), arthrography is not needed
		Pathology of rotator cuff	< 3 months	Replacing other imaging procedures as primary; identifies labrum, hyaline cartilage, bone pathology, non-invasive; arthrography usually not needed (MRI-arthrography, if necessary)
		Avascular necrosis	< 3 months	Most sensitive of early diagnostic methods; plain radiographs and scintigraphy may be negative or equivocal. Grading of so-called double line (subchondral line in anterosuperior joint surface), assessment of joint cartilage, identification of neovascularisation (with contrast medium), differential diagnostics
		Painful endoprosthesis		Synovitis associated with Silastic implants; not yet used routinely with metal prosthesis
Chronic compartment syndrome		Superficial tendons and bursas	< 3 months	
			< 3 months	

3.2 NEURORADIOLOGICAL-SURGICAL MRI (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
3.2.2 Neuroradiology	Suspicion of tumour of auditory nerve		< 3 months	
	Suspicion of syndrome associated with CNS-involvement		< 6 months	
	Suspicion of demyelinating disease (MS)		< 3 months	
	Suspicion of aneurysm or AV-malformation		< 3 months	MRA
	Exclusion of organic causes to psychiatric morbidity		< 3 months	
	Dementia and poor memory		< 3 months	
	Workup of neurodegenerative and metabolic diseases		< 6 months	
	Suspicion of disc herniation in cervical and thoracic spine		Immediately to 1 month	
	Suspicion of disc herniation and spinal stenosis of lumbar spine		< 3 months	
	Diagnosis of postoperative back pain		< 6 months	
3.2.3 Paediatrics	Osteonecrosis		< 3 months	
	Repetitive strain injury		< 6 months	
	Suspicion of anomaly in area of the urinary tract and pelvis		< 3 months	
	Urinary tract infection		< 3 months	
	Storage diseases		< 3 months	
	Chronic intestinal diseases		< 3 months	

3.2 NEURORADIOLOGINEN-KIRURGINEN MAGNEETTIKUVAS (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
3.2.3 Paediatrics				Imaging studies of children aged 3 – 12 months require special consideration due to anaesthesia-related risks. If possible, even non-urgent studies are preferably carried out when the infant is less than 3 months old, when sedation with a baby bottle still works.
3.2.4 Child neurology	Epilepsy		< 1 month	
	Primary assessment of structural abnormalities		< 6 months	
	Delayed development		< 4 months	
	Suspicion of developmental delay		< 1 month	
	Suspicion of demyelinating disease		< 3 months	
	Assessment of muscle disease or other systemic disease		< 3 months	
	Follow-up after neonatal injury			
	Follow-up after CNS-infection			
	Suspicion of anomaly of spinal cord and spine			
	Motor disability due to other causes than cerebral palsy		< 3 months	
		Assessment of bone structures in the skull and spine, e.g., nerve root compression		
		Identification of degenerative processes of spongy bone		
				MRI never or seldom useful: such clinical diagnoses do not exist in practice!

4. PLAIN RADIOGRAPHY
4.1 GENERAL

Specialty	Primary indication	Secondary indication	Urgency	Note
4.1.1 Chest	Occupational health of new employees)			High-risk groups, e.g., divers
	Pneumonia in adults and follow-up			Repeat examination generally useless if done more often than at 10 days intervals
	Haemoptysis			
	Severe chest pain			
	Intensive care patients			When symptom changes and when some device is put on or taken off
	Severe chest pain			The chest radiograph shows the size of the heart and lung oedema, may exclude other causes for pain
	Moderate and severe chest injury			Demonstration of pneumothorax, fluid effusion or lung contusion
	Assessment of malignancy spread			Poor specificity
		Mild chest injury		Identification of rib fracture does not influence treatment
		Unspecific chest pain		Early in symptom not indicated; if symptom persists may be useful for exclusionary purposes
		Preoperatively		Before cardiopulmonary surgery and probable follow-up at intensive care unit or if patient has a malignancy or may have tuberculosis. May be useful for differential diagnosis in patients with dyspnoea, cardiac problems or elderly patients.
		Follow-up of patients with cardiac and hypertensive diseases.		When symptoms or signs change; comparison to preinvestigation chest radiograph
		Acute lung infection in a child		Initial and follow-up images are needed when findings or symptoms persist or if child is severely ill. Should be considered if the patient has fever of unknown origin or recurrent productive cough.

4.1 GENERAL (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
(jatkoa) 4.1.1 Chest		COPD and asthma		When symptoms or findings change, for children if sudden wheezing ensues (possibility of inhalated foreign body)
		Cardiac murmur		No indication for routine chest radiography. If needed, referral to specialist and echocardiography.
4.1.2 Sinus	Sinusitis			If physical exam is inconclusive. Not indicated routinely. Treatment with antibiotics should rest on verified diagnosis by sonography or by radiography + sinus puncture. Radiography is useless for young children (< 4 years), because sinuses are small and mucous membrane oedema may be present in symptom-free patients. For children above 4 years of age the occipitomental projection suffices.
4.1.3 Musculoskeletal system	Osteomyelitis			In suspect cases, despite negative initial findings
	Suspicion of primary bone tumours			Primary investigation; may show location of tumour.
	Prolonged skeletal pain			Local radiography or symptomatic location
	Skeletal metabolic diseases			Radiography may reveal a lesion and the cause for local pain. Obligatory investigation, if an injury is involved and an osteoporotic fracture is possible.
	Identification of joint disease			May be useful for assessment of the cause, despite the fact that, e.g., arthritis-related bone changes emerge late.
		Localisation of known primary tumour or skeletal metastasis		Insensitive for identification of metastases. Local radiographs are sometimes needed to exclude other diseases, especially in conjunction with scintigraphy. Necessary before MRI.

4.1 GENERAL (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
4.1.4 Cervical spine	Suspicion of injury: severe pain or neurological symptoms			Lateral projection most important, the C7 - Th1-area must be visible. Head injured patients needs also cervical radiography; CT or MRI is indicated if radiography is equivocal or the patient polytraumatised
	Possibly an atlanto-axial sub-luxation present in patient with rheumatoid arthritis or certain anomalies			Lateral projection under controlled flexion suffices
	Progressive neurological symptoms in neck-shoulder region or upper extremities			
		Neck pain, brachial pain or shoulder pain		Degenerative changes begin in early middle age. There is a poor correlation between visible intervertebral changes and nerve root findings. Intervertebral disc herniation is not visible on radiographs.
4.1.5 Thoracic and lumbar spine	Injury: severe pain and / or neurological deficit symptom			Imaging of painful area, if patient is elderly and has fallen or the injury force was high. Routine radiography is not indicated if patient is conscious and the pain is not severe.
	Pain without injury			Elderly patient may have osteoporotic fracture or other skeletal morbidity that causes sudden pain. Suspicion of tumours, infection, or (young patients) spondylolisthesis or ankylosing spondylitis. Degenerative changes are common and unspecific.
	Back pain			Pain possibly associated with serious symptoms (symptom debut before 20 years or after 55 years of age, sphincter dysfunction, difficulties in walking, severe or progressive motor deficit, cancer history, signs of general illness, weight loss, steroids, and structural deviation). Always indicated before MRI, if needed.

4.1 GENERAL (continued)

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
4.1.6 Thoracic and lumbar spine	Suspicion of ankylosing spondylitis			May demonstrate changes in vertebral bodies, ligament calcifications and SI-joint pathology
		Acute back pain		Usually the cause for acute back pain cannot be determined from plain radiographs, with the exception of osteoporotic fractures.
		Severely pathological posture		
4.1.7 Pelvis and sacrum	Injury			Fall, intense local pain and loss of weight-bearing potential. Physical examination may be misleading.
		Injury to coccyx, coccygodynia		Not indicated routinely. Identification of fracture often difficult; findings seldom influence treatment.
4.1.8 Humerus	Injury			After intense local pain or luxation several projections are needed.
		Shoulder pain, impingement		Degeneration of rotator cuff and the acromioclavicular joint is common. Radiographs identify calcifications and impingement of the acromiohumeral space, if present.
4.1.9 Olecranon, forearm, wrist	Injury with suspicion of fracture or dislocation.			Navicular fractures may initially be missed on images. Radiography must be repeated after 10 days, if severe symptoms persist. Follow-up of position after fracture healing at completion of treatment. MRI identifies fracture also acutely.
4.1.10 Hip joint	Locked joint			
	Suspicion of fracture			Two projections needed to document fracture of femoral neck.
	Coxalgia			Radiograph taken when suspicion of epiphyseal detachment in young patient and of avascular necrosis regardless of age
	Prolonged coxalgia with movement limitation			Indicated if symptoms persist and hip replacement prosthesis is being considered. Follow-up of hip prosthesis or suspicion of complication.

4.1 GENERAL (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
4.1.11 Knee	Injury			Indicated if the weight-bearing is lost or if there is severe pain in the patella or upper tibia. If knee gets locked and is painful, radiography needed to identify radiolucent fragments.
		Knee pain but no joint lock and no limitation of movement		Arthrosis does not require frequent radiographic controls. Radiograph is needed preoperatively. Seldom needed to demonstrate insertion apophysitis in young patients due to repetitive strain injury.
4.1.12 Ankle and foot	Injury			Severe bone pain, marked soft tissue oedema weight-bearing capacity lost. Seldom necessary to image ankle and foot simultaneously, because pathologies are usually limited to either one.
	Hallux valgus or other foot deformity			For assessment and treatment planning
		Strain fracture Pain in heel and Achilles tendon		Often useless initially Usually useless. Calcaneal sporn is a common incidental finding.
4.1.13 Plain film of the bdomen	Acute abdominal pain, suspicion of perforation or obstruction			Supine image usually sufficient to show obstruction and its anatomical level. Horizontal recumbent or standing image demonstrates intraabdominal air and more precise level of obstruction. Not indicated in constipation or in chronic, mild abdominal discomfort not for workup of palpable mass. If clinical suspicion of perforation is strong, CT is primary imaging modality.

4.1 GENERAL (continued)

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
4.1.14 Panoramic image of jaws	Inflammations and pain in teeth and jaws			Next imaging modality: other intraoral imaging and CT, if needed.
	Injuries to teeth and jaws			In mediofacial fractures radiographs of facial bones and in complicated cases CT
	For orthodontics: developmental stage of teeth, missing teeth, extraneous teeth, developmental anomalies of teeth and jaws			
	Sinusitis of dental origin			
	Embedded teeth			Precise localisation requires stereoptic intraoral radiographs or transverse tomographic images; CT if needed.
	Determination of foci in teeth and jaws			Usually complementary dental images are needed; complementary imaging with CT
	In connection with regular oral health care			In support of physical examination to identify frequent asymptomatic and hidden pathological changes in the area of the jaws
	Suspicion of cysts and tumours in the jaw area			If needed, additional imaging with CT or MRI
	Dysfunction of the temporomandibular joint			Initial imaging of panoramic or double panoramic view to exclude arthrosis /arthritis of the joint. For imaging of the disc, MRI is needed.
	First images in association with implant treatment			Next imaging with transverse tomography, micro-CT or CT-imaging

4.1 GENERAL (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
4.1.15 Skull	For orthodontic purposes and orthognatic surgery			For determination of proportions between jaws and teeth and for treatment follow-up (lateral projection)
	Jaw asymmetry			AP projection of skull
	Jaw injuries and follow-up			Semiaxial AP-projection of the skull in addition to panoramic image
4.1.16 Intraoral teeth images	In association with root canal therapy, local parodontal problems, minor surgical and other procedures; for focus evaluation			Initial images and control images
	Caries			Bitewing images
4.1.17 Occlusal imaging	Tooth- and jaw injuries			In addition to panoramic and semiaxial image of the skull
	Localisation of embedded teeth			
	Suspicion of salivary stone in the mouth bottom			
4.1.18 Mam-mography	Tumour or pain in the breast		1 month	
4.1.19 Plain film of urinary tract	Follow-up of diagnosed urinary calculus		1 month	Diagnostic workup of urinary calculus requires CT

4.2 MUSCULOSKELETAL SYSTEM (SPECIAL INDICATIONS)

Specialty	Primary indication	Secondary indication	Urgency	Note
	Acute monoarthralgia		< 1 month	Soft tissue oedema, calcifications, hydrops, erosions, reduction of interarticular space, fractures.
	Polyarthralgia		< 1 month	Soft tissue oedema, calcifications, hydrops, erosions, reduction of interarticular space, osteophytes
	Osteoporosis		< 3 months	Recommended for spinal column to demonstrate chisel formed vertebra, otherwise no diagnostic value; crucial to measure bone mineral density (with various methods: CT, DEXA etc)
	Ankylosing spondylitis		< 6 months	Erosions of SI joints, sclerosis, symmetric cuboid formation of vertebral corporuses, syn-desmophytes, paraspinal ligament calcification, “bamboo spine”
	Pseudogout (calcium pyrophosphate disease)		< 1 month	Characteristic cartilage calcifications, also of menisci, triangular cartilage in wrist and symphysis and cartilaginous surfaces of the hip. Causes structural changes reminding of arthrosis, but in unusual locations
	Gout		< 1 month	In chronic or relapsing disease clearly delineated erosions are seen, sclerotic borders, and overhanging edges. Characteristic findings are osteoporosis, tophi especially in elbows, patellae and hands.
	Neuropathic arthropathy (Charcot)		< 1 month	Progressive destruction, heterotopic neo-ossification, oedema, dislocation

4.2 MUSCULOSKELETAL SYSTEM (SPECIAL INDICATIONS) (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
	Degenerative arthrosis		< months	Characteristically irregular or unsymmetrical interarticular spaces, hypertrophic paraarticular neo-ossification (osteophytes), subchondral sclerosis and pseudocysts. Typical locations are the DIP- and PIP-joints, basal joint of the thumb, medial interarticular space of the knees.
	Psoriatic arthritis		< months	Typical proliferative erosions (DIP- and PIP-joints of fingers and toes), resorption of terminal phalanges, osseous ankylosis and mutilating arthritis. May be associated with spondylitis, sacroillitis or both.
	Reiter's syndrome		< 6 months	Often asymmetrical polyarticular disease, proliferative erosions (characteristically in lower extremities, e.g., toes, heels). Unilateral involvement of SI-joint not uncommon.
	Rheumatoid arthritis		< 3 months	Hands, wrists, feet. Characteristic soft tissue oedema, periarticular demineralisation, reduced interarticular space, marginal erosions. Usually symmetric in wrists and hands (MCP- and PIP-joints). In feet common affected joints are MTP-joints and IP-joint of big toe. Note: Variants of rheumatoid arthritis (psoriasis and Reiter's syndrome) are usually asymmetrical.
	Myeloma		< 3 months	Demonstrates osteoporosis or multiple separate osteolytic lesions. Pathologic fractures common. Diffuse changes are difficult to identify. Note: Skeletal scintigraphy and plain radiographs are not suitable for screening, since these methods have poor sensitivity and specificity.

4.2 MUSCULOSKELETAL SYSTEM (SPECIAL INDICATIONS) (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
	Meniscus injury		< 3 months	Preferential imaging modality before MRI to show pathological changes. Meniscus calcifications are visible, otherwise no information on menisci from plain radiographs.
	Pathology of the rotator cuff		< 1 month	Sonography is the primary imaging modality and in combination with plain radiography is a good screening method for pathological changes in then rotator cuff. Drawbacks: it is dependent on the radiologist, poor documentation, no information on intraarticular changes (cartilage, labrum, bones, acromion osteophytes, subacromial space).
	Avascular necrosis		< 1 month	Not sensitive in early diagnostics, ideal for follow-up. Spotty sclerosis, subchondral crescent, collapse of joint surface, tight reactive sclerosis and fragmentation of joint surface.
		Carpal tunnel syndrome	< 3 months	Special carpal projections may provide extra information about bone structures. Otherwise MRI is the primary imaging modality, also from the point of view of differential diagnosis.
	Apophysitis (Osgood-Schlatter)		< 1 month	Demonstrates soft tissue oedema and late-stage fragmentation in epiphyseal plate, persisting epiphysis after closure of first one
	Endoprosthesis causing pain		< 1 month	Demonstrates progressive radiolucent periprosthetic areas or in the junction between cement and bone, breakage of endoprosthesis, pathological fracture, malpositioning of the endoprosthesis in later stages, periprosthetic osteolysis. Arthrography ay identify loosening of prosthesis, but is no routine procedure.

5. POSITRON EMISSION TOMOGRAPHY

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
5.1 Neurology and infectious diseases	Assessment of myocardial viability		< 1 month	After equivocal result in SPECT (18F-FDG), primarily dobutamine-echocardiography
	Epilepsy		< 1 month	Only before surgery (18F-GFDG, 11C-flumazenil)
	Parkinson's disease		< 1 month	To support clinical diagnosis (18F-DOPA)
	Osteomyelitis		< 1 month	To support clinical diagnosis, evaluation of treatment response (18F-FDG)
		Alzheimer's disease	< 3 months	To support clinical diagnosis (18F-FDG)
		Other reasons for Parkinsonian symptoms	< 3 months	To support clinical diagnosis (18F-FDG, 11C-raclopride, 18F-DOPA)
				Never or seldom useful: Renal cancer, bladder cancer, assessment of pulmonary spread of prostate cancer, evaluation of malignancy of soft tissue tumours

6. COMPUTERISED TOMOGRAPHY (CT)
6.1 NEURORADIOLOGY

Specialty	Primary indication	Secondary indication	Urgency	Note
	Primary and follow-up imaging modality in bone-modifying diseases (Paget's disease, fibrotic dysplasia, bone destruction)		< 3 months	
	Examination of bone part of the occipito-cervical junction; suspicion of anomalies		< 3 months	
	Suspicion of anomalies of the vertebral corpuses		< 3 months	
	Suspicion of lateral spinal stenosis of spine (skeletal stenosis of bone root canal)		< 3 months	
	Follow-up after shunt operation for hydrocephalus in adults and children			So called shunt control imaging
	Follow-up imaging modality after cerebral infarction, intracranial haemorrhage and posttraumatic haemorrhage (resorption of haemorrhage, final degree of tissue destruction)			
				CT is also the primary imaging modality when MRI is contraindicated, e.g., due to pace maker or because MRI investigation is not possible for patient-related causes
		Primary imaging modality in dementia	< 3 months	
		Exclusion of brain tumour to examine reason for some unchanged symptom of long duration	< 3 months	For example: chronic headache with no signs of increased intracranial pressure

6.1 NEURORADIOLOGY (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
		Suspicion of intervertebral disc prolapsed in lumbar spine	< 3 months	
		Suspicion of spinal stenosis in cervical, thoracic and lumbar spine	< 3 months	
				In these indications the information obtained with CT is usually sufficient. MRI is, however, more sensitive and specific than CT and hence a primary imaging modality.
				Never or seldom useful: Suspicion of demyelinating disease (MS), suspicion of tumour of auditory nerve, suspicion of hypophyseal tumour, exclusion of aneurysm or AV-malformation (note: CT-angiography), suspicion of intervertebral disc prolapsed in cervical or thoracic spine, suspicion of spondylitis, disturbed brain development and epilepsy (among children), suspicion of tumour, demyelination or inflammation in spinal cord, changes in bone marrow of spinal canal

6.2 ABDOMINAL CT AND CT-ANGIOGRAPHY

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
6.2.1 CT-angiography	Cerebrovascular aneurysm		< 1 month	Not haemorrhages nor elderly patients
	Continuous aneurysm of the thoracic and abdominal aorta		< 1 month	
		Suspicion of carotid artery stenosis	< 1 month	Doppler primary method, CT-angiography secondary and for verification
		Suspicion of aneurysm of abdominal aorta and / or assessment of rate of increase	< 1 month	Sonography primary method, CT-angiography secondary and for verification
6.2.2 CT of abdomen (gastroenterology)	Diverticulosis		<1 month	Endoscopy / colography / CT-colography
6.2.3 CT-follow-through	Crohn's disease including complications		<1 month	MRI-follow-through for follow-up of disease activity (no radiation exposure)
	Anaemia for unknown reason		<1 month	Endoscopy

6.3 COMPUTED TOMOGRAPHY OF MUSCULOSKELETAL SYSTEM

Specialty	Primary indication	Secondary indication	Urgency	Note
	Plain radiography is always the primary imaging modality			
		Acute monoarthralgia	< 1 month	Injury, for further examination in complex injuries, localisation of fragments, position of joint surface, strong suspicion of joint injury despite normal plain radiography. Occasionally if there is joint destruction, if MRI is not available.
		Ankylosing spondylitis	< 6 months	Morphological imaging method, sensitive in early disease stages for indicating erosions, no iodine contrast medium needed
		Neuropathic arthropathy	< 1 month	Dislocations and fragmentation better detailed than with MRI
		Carpal tunnel syndrome	< 3 months	For examination of bone structures, fibrotic fascia visible. Poor soft tissue resolution!
		Painful endoprosthesis	< 3 months	Identifies with higher sensitivity osteolysis, wear of plastic parts, pathological periprosthetic fractures. Second imaging modality after plain radiography.

6.4 PULMONARY RADIOLOGY

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
6.4.1 CT of lungs	Chest radiography always precedes CT			
	Tuberculosis		< 1 month	
	Assessment of infiltration or atelectasis of unknown character (unless strong suspicion of cancer)		< 1 month	
	Assessment of pleural pathology of unknown character (unless strong suspicion of cancer)		< 1 month	
	Pneumonia that responds poorly to treatment		< 1 month	
	Examination of prolonged cough		< 3 months	Often also HRCT
	Examinations for haemoptysis		< 3 months	Often also HRCT

6.4 PULMONARY RADIOLOGY (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
6.4.2 High-resolution CT of the lungs (HRCT)	Chest radiography must always precede the first CT-study			
	Lung or pleural fibrosis		< 3 months	Especially workup of asbestos-related illnesses
	Recurrent pneumonias		< 3 months	Often also CT
	Drug reaction		< 1 month	
	Sarcoidosis		< 3 months	
	Emphysema		< 3 months	
	Bronchiectasia		< 3 months	
	Cystic fibrosis		< 3 months	
	Unspecified lung infections or pneumonitis when chest radiography is normal		< 3 months	
	Diagnosis of diffuse parenchyme infiltrations in chest radiography or follow-up of treatment of symptomatic patients		< 3 months	
	Disproportion between pulmonary function and findings on chest radiography or rapidly decreasing lung function and the diagnosis is open		< 3 months	
				Never or seldom useful: <ul style="list-style-type: none">▪ Asthma, COPD and other illnesses of bronchial function (no suspicion of complications)▪ Acute bronchitis▪ Routine follow-up of lung cancer▪ Sleep apnoea

7. SONOGRAPHY (ULTRASONOGRAPHY)

<i>Erikoisala</i>	<i>Ensisijainen tutkimusindikaatio</i>	<i>Seurantatutkimukset</i>	<i>Kiireellisyys / seurantaväli</i>	<i>Huomioitavaa</i>
Sonography	Screening: foetal screening			at 12 – 13 weeks and at 20 weeks
	Foetal anomalies, growth follow-up, foetal size (obstetrics)			
	Uterus and adnexa (gynaecology)		< 1 month	Part of physical examination
	Upper abdominal pain (e.g., cholelithiasis)		< 1 month	
	Suspicion of liver disease, guided sampling for cytology and / or histology		< 1 month	
	Further examination of focal finding in connection with MRI, contrast-enhanced liver sonography		< 1 month	Cysts and unequivocal haemangiomas do not require further examinations
	Kidneys		< 3 months	Not relevant for imaging of renal tumours
	Liver		< 3 months	E.g., when transaminase levels are high, assessment of portal vein flow when cirrhosis is suspected
	Suspicion of thyroiditis, chronic thyroiditis		< 1 month	
	Salivary glands (stone, tumour)		< 1 month	
	Complement to mammography		Annually or biannually	
		Determination and follow-up of size of parenchyme organs (spleen, liver, kidneys)	< 6 months	E.g., for diagnosis and treatment follow-up of haematological conditions
		Follow-up of focal changes in the liver and other parenchyma organs	< 6 months	
		Follow-up of aneurysms	< 6 months	

7. SONOGRAPHY (ULTRASONOGRAPHY) (continued)

Erikoisala	Ensisijainen tutkimusindikaatio	Seurantatutkimukset	Kiireellisyys / seurantaväli	Huomioitavaa
(continued) Sonography				Never or seldom useful for follow-up: Bone healing Never or seldom useful for diagnosis: Pulmonary diseases (exception: peripherally located tumours) Mediastinal diseases CNS and brain diseases (exceptions: imaging of foetuses and neonates) Skeletal diseases Suspicion of gut perforation Oesophagus diseases Diseases of the stomach (thickness of stomach wall can be measured) Diseases of the colon
Measurement of residual urinary volume			< 6 months	
Sonographically guided sclerotherapies	Focal change in liver, thyroid adenoma, cysts, hydrocele, superficial varicosities, Achilles tendinosis		< 3 months	
Sonographically guided injections and aspirations	Intraarticular and peritendon injections. Calcium aspiration from subacromial space		< 3 months	
Virtsan residuaalimittaukset			< 6 kk	

7.1 ECHOCARDIOGRAPHY

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency / follow-up interval</i>	<i>Note</i>
Foetuses:	Suspicion of congenital cardiac defect in screening sonography or history of maternal risk factor for cardiac malformation		< 1 month	
	Arrhythmia		< 1 month	
	Child with congenital cardiac defect in the family from before		< 1 month	
Children:	Cardiac murmur, cardiac defect possible or cannot be excluded		1-6 months	
	Arrhythmia		< 6 months	
	Suspicion of heart failure			Emergency referral or < 2 weeks
	Suspicion of cardiac defect in child < 1 year			Emergency referral or < 2 weeks
	Suspicion of cardiac defect in neonate			Emergency referral
Adults:	Cardiac murmur, cardiac defect possible		< 6 months	
	Cardiac murmur and suspicion of cardiac defect		< 1 –3 (-6) months	
	Arrhythmia and suspicion of cardiac defect		< 6 months	
	Suspicion of heart failure			Emergency referral or < 3 months
	Chronic coronary heart disease and worsening of clinical condition			Emergency referral or < 3 months
	Acute and chronic chest pain			Emergency referral or < 3 months

7.2 MUSCULOSKELETAL SYSTEM

Specialty	Primary indication	Secondary indication	Urgency	Note
Sonography		Acute monoarthralgia	< 1 month	Demonstration of hydrops (e.g., in hip), bursas, tendinitis
		Polyarthralgia	< 1 month	Demonstration of hydrops (e.g., in hip), bursitis
		Rheumatoid arthritis	< 3 months	Soft tissue inflammation, synovitis, bursas, entesitis, sonographically guided injections
			< 1 month	In combination with plain radiography is a good screening method for pathological changes in the rotator cuff. Drawbacks: it is dependent on the radiologist, poor documentation, no information on intraarticular changes (cartilage, labrum, bones, acromion osteophytes, subacromial space). MRI or arthroscopy occasionally needed for further assessment.
Sonographically guided injections and aspirations		Apophysitis (Osgood-Schlatter)	< 3 months	Soft tissue oedema, tendon, infrapatellar bursa, fragmentation of growth plate
	Pathology of superficial tendons and bursas		< 1 month	
	Intraarticular and peritendon injections. Calcium aspiration from subacromial space		< 3 months	

8. CONTRAST-ENHANCED IMAGING
8.1 GI-TRACT

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
8.1.1 Contrast-enhanced imaging of pharynx and oesophagus	Suspicion of oesophageal diverticulum		< 3 months	
	Globus		< 1 month	
		Suspicion of swallowing pathology	< 1 month	Endoscopy and functional examinations are primary.
		Motility disturbance of oesophagus	< 3 months	
		Difficulties to swallow	< 1 month	Only if patient refuses endoscopy and if there is a suspicion of a diverticulum not identifiable by endoscopy
8.1.2 Contrast-enhanced imaging of the stomach		Weight loss	< 1 month	Only if patient refuses endoscopy and if there is a suspicion of a diverticulum not identifiable by endoscopy
		Problems with swallowing, MS and stroke patients		Videofluorography
	Adult patient refuses endoscopy		< 1 month	
	Motility disturbance of the stomach		< 3 months	
8.1.3 Barium follow-through (cf. also CT)				Contrast-enhanced imaging of the stomach is not indicated if there is a suspicion of a ventricle tumour nor after ventricle resection; endoscopy is primary
		Crohn's disease		Wireless capsule endoscopy for initial examination and if findings are few. Occasionally to examine if capsule will pass. For assessment of complications, CT-follow-through is preferable. For follow-up of activity MRI-follow-through is preferable.
8.1.4 Contrast-enhanced imaging of small intestine (Gastroenterology, paediatrics)			< 1 month	
	Suspicion of enteral fistula	Posthaemorrhagic anaemia	< 1 month	Endoscopy, capsule endoscopy
		Functional intestinal symptoms	< 3 months	CT / MRI / wireless capsule endoscopy

8.1 GI-TRACT (continued)

Specialty	Primary indication	Secondary indication	Urgency	Note
(continued) 8.1.4 Contrast-enhanced imaging of small intestine (Gastroenterology, paediatrics)		Follow-up of chronic inflammation of the small intestine	< 3 months	Endoscopy / MRI / CT
		Suspicion of chronic inflammation of the small intestine	< 1 month	Endoscopy / MRI / CT
8.1.5 Contrast-enhanced imaging of large intestine (Gastroenterology, paediatrics)	Examinations of patient who has clinically had diverticulitis	Diverticula	< 3 months	
	Rectal bleeding		< 1 month	If endoscopy is not successful; CT is an alternative
	If patient refuses endoscopy (depending on symptoms)		< 3 months	
	If endoscopy fails or is incomplete		< 1 month	
	Suspicion of colon fistula		< 1 month	
		Posthaemorrhagic anaemia	< 1 month	Endoscopy primary investigation
		Functional intestinal symptoms	< 3 months	Endoscopy primary investigation
		Follow-up of chronic colitis	< 3 months	Endoscopy primary investigation
		Suspicion of terminal ileitis	< 1 month	Endoscopy primary investigation
		Changed intestinal function	< 1 month	Endoscopy primary investigation
8.1.6 Anography (Paediatrics)	Suspicion of polyposis		< 6 months	Endoscopy primary investigation
	Suspicion of intestinal malformation/anomaly		< 3 months	
8.1.7 Defecography (Gastroenterology)	Suspicion of rectal prolapsed or rectocele		< 6 months	
	Functional disturbances of rectum		< 6 months	

8.2 URINARY TRACT

<i>Specialty</i>	<i>Primary indication</i>	<i>Secondary indication</i>	<i>Urgency</i>	<i>Note</i>
8.2.1 Urography		Examinations after episode of renal or flank pain	< 1 month	CT and sonography have replaced urography as the primary imaging modality in acute urinary tract colic
		Prostate pathology and urinary retention		Occasionally needed for assessment of urinary tract
		Documented urinary tract infection in children		In addition to sonography and scintigraphy urethrocytography with digital fluoroscopy is an alternative, especially for examination of boys under 2 years of age
8.2.2 Micturition cystography (paediatric patients)	Recurrent urinary tract infections and / or suspicion of urinary tract anomaly		< 3 months	For assessment of pathology in this anatomical region, special indications
		Suspicion of ureter reflux	< 3 months	Nuclear micturition cystography is the primary imaging modality.